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New Zealand Qualifications Authority

Scholarship 2023

Technology 93601

OUTSTANDING SCHOLARSHIP EXEMPLAR

By 2024, next year, I will have graduated high school and be pursuing tertiary study. This will be a massive lifestyle change for me as I take a lot of pride in my school and the work I do for it as a student as well as a leader. I am excited for this change as I know I will be able to take lots of new opportunities and really explore my personal interests. I also plan to pick up a part time job, as I haven't had time to work more than casual jobs while studying at high school.

My garment/garments that I create this year will be designed specifically for my environment next year, this is so that they will be worn to their maximum potential. I am not exactly sure where I will be next year, but I intend to be studying somewhere. This will likely be a school for some sort of design, so I would love for my pieces to reflect my passion for design, while also being practical – for example not something with a train or wide skirt as this would be inconvenient to wear and potentially a safety hazard. As a young person straight out of high school, I suspect life will be quite unpredictable for a while as I figure out what I would like to do with my time and extended freedom, therefore my garments need to be versatile so that they will be worn in many potential situations rather than a specific one. I will do lots of research to combine my own preferences with practical conventions so that my garments are as useful to me as possible. This includes things such as highlighting my body type, colour palette, while also being sustainable, and ethical.

Social Environment

Socially, my garments need to be acceptable. I will be around people my age, and then a variety of older ages e.g. teachers, students, and other staff. My garments therefore cannot be too revealing and unrespectable. They will need to be pieces of casual daywear, though it wouldn't be a bad thing if they could be dressed up or down for other things such as going out for dinner or enjoying nightlife with my friends. Another thing I need to consider with appropriation is culture. I will need to make sure that my designs and materials do not impede on any cultural or religious beliefs as I would hate to accidentally offend anyone because I was just unaware. As well as consulting stakeholders who may be able to help me with this, I will do some research to educate myself on the mistakes made by, as well as the success of, other designers and their products. I will look at media to see existing designs to get ideas for what sort of thing people wear, as well as looking at existing designers and seeing what their collections are like, to see what makes them socially acceptable and then apply this to my garments to ensure they are culturally appropriate. By specifically communicating with some people from my environment as stakeholders I can ensure that this will work. I also need to be conscious of other environments, so I will be very considerate of sustainability and ethics throughout the entire process as it is a key driver for this project.

For my garments to be practical enough to wear at a university, my garments would need to be things I could sit in comfortably for multiple hours for classes where I might be at a computer, but also something I could move around in if I was standing at a high table or moving around a workshop or a campus.

Specific Environmental Conditions

I am unsure of exactly where I want to study next year, my two main options would be in Wellington, or in Christchurch. They have slightly different climates to each other, so I need to consider which one of these options is most likely so that I can specifically develop my garments to be best suited for it – meaning it is the most practical as possible. For the purposes of this project, I am going to consider Christchurch as my most likely option, as moving to Wellington depends on many factors that I cannot count on at this stage. I also have lived in Christchurch my entire life so can make more educated judgments of what our climate is like. These recent graphs from NZ Weather & Climate clearly show what weather is like in Christchurch, the most noticeable features being the significant contrast between seasonal temperatures, and the relatively high annual rainfall.

The seasonal difference in temperatures is massive, the statistics on the NZ Weather & Climate website stating that the average temperatures in January (the hottest month) are 23° Celsius. The lowest temperatures are in July with 11° Celsius. With this significant difference of 12°, I will need to consider how my garments can cater to more than just one extreme. For example, I don't want to make a large winter coat that I would wear once or twice on the coldest days of July, and then would sit in my closet the rest of the year. Something that could aid this is the fact that I can layer clothes, it's useful to be able to have something I could wear by itself or with minimal other clothing on warm days, and then also with many warmer layers for the cold season. Then there is the issue of the precipitation; for maximum versatility it would be very useful for my garments to be either waterproof, or something I could easily put a waterproof layer over top of.

Client

My garments that I am designing and making this year will be for myself, therefore I am my own client.

Body type: Lean Column

The lean column body type is characterised by a straight figure with minimal curves, meaning the shoulders, waist, and hips are similar in width. The goal when dressing for this body type is to create the illusion of curves and to define the waistline, according to *Color Me Beautiful* by Carole Jackson.

She recommends:

- Create curves with layers: Adding layers such as jackets, cardigans, and vests can help create the illusion of curves by adding bulk to the upper body.
- Highlight the waist: Defining the waistline is important for creating the appearance of curves. Wear high-waisted pants or skirts and tuck in your shirts or blouses to accentuate your waistline.
- Play with proportions: Experiment with different proportions to create the illusion of curves. For example, pairing a fitted top with a full skirt can create the appearance of a smaller waist and fuller hips.
- Use accessories strategically: Belts, scarves, and jewellery can all be used to highlight your waist and create the illusion of curves.
- Choose the right fabrics: Look for fabrics that drape well and add movement to your silhouette, such as silk or chiffon.
- In general, it's best to avoid clothing that is too boxy or shapeless, as it can make you appear straighter than you are. Instead, opt for clothing that accentuates your waistline and adds curves to your figure.

Dressing according to your body type, as people used to suggest, is an old idea that doesn't really work in today's world. It's like saying there's a specific way you should dress based on your body shape, which is pretty limiting. These days, fashion is more about showing your own style and feeling comfortable. We're moving past those old rules and starting to appreciate all kinds of body shapes and fashion choices. So, I'm all for designing and wearing clothes that I like and that make me feel good, without worrying about what the old ideas say. It's all about being yourself and wearing what makes you happy. I will be designing garments in basically whatever styles I am drawn to and can see myself wearing, without thinking about these 'rules' that are now just irrelevant in today's society.

Colour Palette: Deep and Warm

The Second Edition: Fashion and Textiles book by Jenny Udale has an interesting passage on colour psychology. She discusses the evidence that shows how certain colours affect our mood. There are colours that make us feel depressed such as black and grey, and then others such as blue which are said to be calming. There are many other colours also described to have emotional effects on us. These theories are interesting to consider, but fashion designers – myself included – tend to choose colours



artistically rather than physiologically. Basically, I chose colours of my clothing based on the general aesthetic that it gives off, and what colours make me happy as I believe this is more important.

With my personal colour palette there are also particular tones that compliment my looks – that make me look healthier. These include rich earthy tones like terracotta, deep olive green, rust, and mustard. Also, warm jewel tones like deep ruby red, emerald green, and sapphire blue.

Some tones that could make me look less healthy and suit me less are cool colours like icy pastels or shades of blue that have a cool undertone, and harsh or bright colours like neon shades.

Similarly to body type, however, these ideas are very dated. I believe it is far more important to wear colours that make me happy and suit my aesthetic rather than what would technically compliment my complexion. I know I don't need to limit myself to certain colours that are supposed to suit me. It's more fun to wear what I like, and that could mean literally any colour and tone.



Wardrobe Analysis

To figure out what will be the best thing for me to make, I have to analyse what I already have so that I can recognise patterns within my style and also potentially fill any gaps. Here is a collection of outfits that I have worn. Looking at these together really helps to give me an idea of the look of my overall style, and inspiration for future clothes. The main thing I can take from these pictures is that all my pieces are unique, or at least styled in a unique way. Almost every single piece of clothing I have either sourced second hand or made myself. The pieces I buy that are brand new, I try to style with other pieces that are not new so that the look is still original. These new pieces I try to buy from shops that aren't fast fashion, so this tends to mean they are rather expensive, which is the reason I don't buy many new ones. The positives of not really buying fast fashion, however, is that the pieces are well made so they last a long time, can be resold or donated, and I know that they are much more likely to be ethically made which is very important.

Tops: I love layering tops together as this creates a more interesting and unique look. I have some tops that I only wear for layering – a bonus of this is also warmth. I own

a lot of oversized men's t-shirts as these are really comfy and I like the look. I like jackets and vests and button ups; I will layer these over other things so as I feel like this makes a look seem more put together and stylish. Recently I got a waistcoat which is great fun to layer as it is purple and has an adjustable clasp at the back so that I can wear it with or without bulky layers underneath.

Pants: for pants I tend to wear full length (never capris or cropped), and wide/straight leg. The waistline varies, I don't really have a particular one I like more than others, so I tend to change it up. I have some jeans that are very high rise and some that are mid to low rise. If I decide to wear pants it's usually for comfort, which means I don't wear any that are very thick or ones that are very tight. I often struggle to get the look I want with pants so the ones I wear the most are ones I have made or ones I have altered to fit me perfectly. My issues with finding them new is that for them to fit my waist they don't fit my hips and are too short.

Jackets: I get very cold, so many of my outfits end up having to include jackets, out of necessity! I have a plain puffer jacket that I wear if it is very cold, and I have a pink trench coat that is great for if it is rainy but not too cold. I would consider making some kind of jacket – maybe a cropped one – as one of my garments as I don't have one and think it would be very beneficial next year, especially if I am not living at home.

Skirts: Skirts are probably my favourite thing to wear, I love them. They are so much fun to style and I think they are more interesting than shorts or pants. The majority of the skirts I own are mini/micro length, I like the way they look on me. I reckon mini skirts look great with chunky boots and baggy tops. I have gotten taller recently though so I might want to make a skirt that is a better length on me.

Dresses: I don't wear dresses very much, I just prefer to wear skirts or pants. I have a couple, the main times I wear them are for formal events such as family birthdays or weddings. Because I rarely wear them, I have decided that I don't want to make one as it would not be an item that would be well suited for me.

Jumpsuits: I love jumpsuits; similarly to how I love to wear monochrome outfits, jumpsuits have a similar role to these. I have a few that I wear, my favourite being a colourful fitted one. I love how bright and bold it is, as well as how comfortable it is due to its stretchy material. It is a really handy piece in my wardrobe because I believe it is a nice outfit without anything else so I can throw it on in a rush, but I can also creatively style it with layers if I decide to or if it's cold. I don't have any short jumpsuits/playsuits that are more suitable for summer so that is a potential gap I could fill.

Looking at the photos of my own outfits/style and then my analysis of them, I cannot see a specific aesthetic, but there are certain similarities. It is hard for me to label a

specific style for myself, I would rather describe my outfits as just unique. I tend to stray from mainstream fast fashion styles and avoid trends when I can. This is often because I genuinely do not like these trends, but also mostly because with my generation – Gen-Z – trends develop and catch on extremely quickly, so within weeks of a look or style being unique, every second person is wearing it. This is no critique of these people that closely follow trends, I just personally prefer to have my own style that is unique to me. This boosts my confidence; I love the individuality that a creative style can give someone. Often my looks do fall under a different category, I sometimes dress to a specific decade, or an aesthetic I had seen on Pinterest. As someone of my generation, as with the majority of my peers, I spend a lot of time on social media. On here I am exposed to many different fashion ideas, from influencers like Lara Adkins and Eve-Lily on Instagram, to the luxury fashion houses on all platforms, I consume a real variety of content that all helps to inspire my personal style. Lara Adkins is truly incredible, I think she deserves even more attention and praise than she gets with her current three hundred thousand Instagram followers. She does a fantastic job at integrating pieces of luxury fashion with iconic looks from the last few decades. She re-styles clothing from different eras in new creative ways that give them use again (so inspiring buying second hand clothing and being sustainable), while also giving them a unique and trendy edge which makes her looks so appealing today. My design aesthetic comes from these things, as well as books. I have *ALEXANDER MCQUEEN: MIND, MYTHOS, MUSE*, which I love and get inspiration from. I love McQueen's silhouettes, as well as his capacity for storytelling. His looks encapsulate individual slices of his imagination, each one so powerful. These things and designers/stylists like these drive me as a designer, their ideas inspire me to create what I create, and wear what I wear.

Wardrobe Analysis Feedback	
Stakeholder	Feedback
█ (Pattern Maker)	I love how diverse your 'looks' are, that you don't just have one particular 'look'. It's good that you have an understanding that clothes need to be fit for purpose - you know that you get very cold so you have many jackets in your wardrobe. I love it that you wear lots of colours, not just the ones in your colour palette. Sometimes wearing a particular colour just brings you joy.
█ (Sister)	I always love your clothes, I feel like they actually are very versatile and can be worn in heaps of different ways. I know this first hand because we have really different styles and I can still wear lots of your clothes mixed with my own and it works well.
█ (Fashion Teacher)	A great analysis █. I cannot believe that you have made these outfits. You are amazing! Your outfits are quite broad and diverse and it is great to see that you are using them. This is a very clear and comprehensive description of your client and analysis of your current wardrobe.

Context Considerations

What are my restrictions? What extra things do I need to consider?

Budget: Budget is a slight restriction, but for the sake of making my garments as good as possible I will try my best to not let it limit me. I have set myself a budget of \$100 but if I feel like I need to spend more than this then I will. I will not sacrifice quality or use unethical/non-sustainable materials for the sake of keeping the costs down. I don't believe that clothing should be worth the cost of the environment, and damage to people. I also want my garments to be well worn and this will only happen if they are made from fabric of a high quality.

Ultimate Disposal: I will be considering the ultimate disposal of my garments throughout the entire design and construction process. I want my designs to still be my current style otherwise I won't wear them, but I also want them to be timeless - therefore not falling subject to the crazy masses of trends and micro-trends. If I did, then it would be likely that after a few months or a year I would not want to wear the garments anymore, and they also would likely not be the kind of thing other people would then want to wear either. I will make my garment as high quality as I can so that it lasts as long as possible and could also be passed on or donated to have many more lives after I'm done with it. This is something I want to do as it is beneficial to the environment as it reduces waste. Once it has been worn to its fullest potential it will likely go to landfill, but I will try to make it with biodegradable materials to limit its damage.

Time: I need to be mindful of time while following the process of making these garments. As I intend to make them at a very high standard, while also only having limited class time, I am aware I may need to use my own time after school to help ensure my garments are finished on time. I need my garments finished by the end of week 2, term 4 as this is when it will be benign assessed, so to do that I want to allow most of term 3 and up to the show in term 4 to physically make them - so working backwards this means my final designs need to be done by the end of term 2.

Skill Level: I am looking forward to creating garments this year that will challenge me - I have done a fair bit of designing and construction before so I am excited to take this opportunity to push myself and try some new techniques. The only thing with this is that trying new things can take more time than expected, so I need to be mindful of this so that I don't plan something too complicated and end up compromising the quality of the outcome of my garments due to not having enough time.

Social and Technical Acceptability: Cultural appropriation is the sadly common act of taking elements from a culture that is not one's own without proper understanding or respect for their significance. In New Zealand, an example of cultural appropriation in

fashion would be the use of Māori designs and patterns without appropriate acknowledgement or permission from the Māori community. These designs hold great cultural significance to the Māori people and are often seen as taonga (treasures) that represent their unique history and identity. However, they have been appropriated by non-Māori designers for profit, leading to the diminishing of the culture's significance and history¹. This further marginalises the Māori community. There are many other examples of cultural appropriation, some as obvious as this, but many more that people do accidentally without even realising. I will try to be very careful when designing so as to not make any mistakes that can be harmful to other people's cultures. It is important that I know this could be a potential issue. I know from this research about some things to avoid, and I'm now more aware of the fact that there are cultural things I need to be responsible about. This has helped me to understand what my limits will be once I get to designing. Consulting stakeholders will help with this as they have a wider range of knowledge that I can learn from.

Maintenance: Maintenance is one of the key things I will be considering when planning and making my future garment. For it to be fit to its purpose it needs to be durable, so that I can get lots of use out of it while also feeling comfortable that the wear won't be permanently damaging it. I need the fabric to be strong enough to not rip and for the seams to not be at risk of seam slippage. Another thing is that I need the fabric to be at low risk of shrinkage as this could alter the fit of the garment meaning that then it is not going to be as useful to me and this would take away all the hard work I will have put into drafting a pattern that fits me perfectly. I don't want the colours to fade either, unless I specifically plan for this to happen as a design feature – which is unlikely. For next year I will be either inside studying or walking the campus and as it can get very cold in Christchurch, I don't want to risk getting stuck without reasonable clothing because one of my garments had an issue with it – for example the fabric of my jacket rips which means I cannot wear it so consequently get very cold while walking around. Throughout the process of this project, I will have to be very aware of these maintenance considerations.

Sustainability: Another important consideration is the sustainability of my garment. Our world is consistently being ruined with uses of materials and supplies that cannot be sustained, as they are ruining our planet. There are so many fast fashion brands that continue to use practices that are not sustainable, so I want to do my part to help by making a sustainable garment. This will mean I will be very mindful when selecting fabric I work with, I will make sure I understand the process that it has been through and ensure that this is sustainable. Another option is to save a garment from landfill by giving it a new life: upcycling it.

1

(<https://www.theguardian.com/commentisfree/2019/dec/04/cultural-appropriation-of-maori-traditions-is-an-exercise-in-entitlement-and-privilege>)

Ethics and Sustainability

I have decided that ethics and sustainability will be a major focus of mine throughout this project as it is so important and I wasn't to make sure I am being responsible.

Ethics is basically a term that covers the moral principles that a person acts on. A person must be aware of their own moral principles to be able to apply ethics to their decisions. Though some morals can be controversial, many are very widely accepted and viewed as common sense such as fair treatment of people and animals and looking after the environment. Ethics in fashion refers to the principles and values that guide the fashion industry in its treatment of workers, animals, and the environment. It encompasses a range of issues, including labour rights, fair trade practices, sustainability, animal welfare, and transparency. In recent years, there has been growing concern about the impact of the fashion industry on the environment and society. The industry is known for its fast-paced production and consumption, which often comes at the expense of the people and resources involved in the manufacturing process. As a result, there is a growing demand for more ethical and sustainable practices in fashion.

Sustainability is a term that is thrown around frequently, and how it applies to fashion is very important. Sustainability is defined by Oxford Languages as avoidance of the depletion of natural resources in order to maintain an ecological balance. Basically, it just means that something that is sustainable is just that – able to be sustained without draining natural resources. For fashion this applies to the products used to produce a garment such as fibres, water, chemicals, and machinery.

In the February 2022 edition of New Scientist, Joshua Howgego writes an intriguing piece on the material world we live in, with a focus on the idea of circular economies. In the first few paragraphs Howgego states concerns about the overall material consumption – with people buying, owning and discarding too much stuff. He puts this down to the recent rising of the population, as well as increasing affluence. The consequences of these being that people can easily consume far more than they need, turning over products and discarding them at an alarming rate that the planet just cannot sustainably continue to keep up with. Many of the products people are consuming such as synthetic fabrics or concrete/steel construction materials are not made from natural substances, they often take energy that comes from fossil fuels to make and take hundreds of years to decompose. This is all very unethical; therefore, changes need to be made.

The idea of a circular economy is suggested as this produces little to no waste. The four suggestions for this to become reality are these:

1. Using less material to make things – in terms of fashion this would mean zero waste pattern cutting or at least very clever pattern placement to minimise waste as much as possible.
2. Using products for as long as possible. So not throwing out garments as soon as they are not trendy anymore, or the better option would be not buying into

micro trends in the first place. Also, when garments get damaged, they should be upcycled or mended whenever possible

3. Recycle; basically as mentioned before, if garments are not wanted anymore as they are, they should be changed into something newer or more functional so that they can still be used for as long as possible (see point 2).
4. Regenerating when possible by using bio-based materials that will not be harmful when they break down.

Pretty much, the point of the circular economy is that products can be used for long periods of time, can be recycled/upcycled, and then eventually when they must be disposed of – this can be done easily and sustainably as the products were made with eco-friendly materials in the first place. The extension of the life expectancy of a product is fantastic as this means that there is less waste in the production process. For example, even though cotton is a natural fibre so is viewed as eco-friendly, in reality it often isn't. This is due to the high quantity of wasted water that goes into processing the cotton, as well as the chemicals and dyes used to treat it. Howego believes that real change could be starting to happen now though, to combat this pressing issue. The idea of a circular economy that was dismissed as 'woolly utopianism', has now been reassessed as we increasingly have the technology and ideas to help improve our consumption patterns for the sake of the planet and each other.

There are so many issues relating to changing the worldwide production of garments. They come from many things such as the way that materials are developed and dyed. Hard toxic chemicals are used on fibres to treat them which are very harmful on the environment, as well as how the fibres are grown – or synthetic fibres are made. The process is so resource intensive, including land, water, fertiliser, synthetic and natural fibres - and more. These things are all limited so must be preserved as much as possible. Most often, the main negative impact of the rapid production rates is the CO₂ emissions. In 2015 the equivalent of 1.2 gigatonnes of carbon dioxide came from producing fibres and turning them into clothes. This was over 2% of global greenhouse gas emissions that year. So many garments are being discarded all the time – about a truckload a second! 73% of the materials used to make clothes end up eventually being sent to landfill or incinerated.² Garment ending up in landfill or being incinerated is terrible as this marks the end of its lifecycle, meaning the resources used to make it are gone and will not get any more use – proving that it was not a product that was part of the circular economy. The CO₂ emissions are an issue as they contribute to climate change.

Microfibres:

² J Howego How to cut material use in buildings, clothes, electronics and plastic. Retrieved from: <https://www.newscientist.com/article/2307441-how-to-cut-material-use-in-buildings-clothes-electronics-and-plastic/#:~:text=In%202015%2C%20the%20equivalent%20of,you%20draw%20on%20as%20needed.>

Microfibres are a massive issue, with recent studies around New Zealand finding them in marine sponges in Wellington Harbour, and the rain in Auckland. The issues with this are that the wildlife – particularly marine – are ingesting these microplastics which can be very harmful in the bloodstream. Same goes for humans, with microplastics in the rainwater many people are drinking this so also ingesting the microplastics. The scary thing is that they have also been found in human blood for the first time in 2022. According to an article on News Hub, microplastics were found in almost 80% of people tested, the particles in blood can travel around the body and may lodge in organs. The exact impact of this on people's health is currently unknown but there is lots of research being done to find out more.

About 60 percent of material made into clothing is plastic, which includes polyester, acrylic and nylon textiles. These synthetic fabrics are lightweight, durable, affordable and flexible. But here's the catch: every time they're washed, they shed tiny plastic fibres called microfibres, a form of microplastics—tiny pieces up to five millimetres in size. One of the reasons these are so dangerous is that you cannot see them, so they can be accidentally ingested, and you have no way of knowing otherwise. Laundry alone causes around half a million tonnes of plastic microfibers to be released into the ocean every year — the equivalent of almost three billion polyester shirts.³

Microfibres are a massive issue, with recent studies around New Zealand finding them in marine sponges in Wellington Harbour⁴, and the air in Auckland⁵. The issues with this are that the wildlife – particularly marine – are ingesting these microplastics which can be very harmful once in the bloodstream. Same goes for humans, with microplastics in the air and water many people are also ingesting the microplastics. The scary thing is that they have also been found in human blood for the first time in 2022. According to an article on News Hub⁶, microplastics were found in almost 80% of people tested, the particles in blood can travel around the body and may lodge in organs. The exact impact of this on people's health is currently unknown but there is lots of research being done to find out more.

³ B Rensick More than ever, our clothes are made of plastic. Just washing them can pollute the oceans. Retrieved from:
<https://www.vox.com/the-goods/2018/9/19/17800654/clothes-plastic-pollution-polyester-washing-machine#:~:text=But%20you%20might%20not%20be,makes%20up%20our%20clothes%20worldwide.>

⁴
<https://www.newshub.co.nz/home/new-zealand/2023/03/scientists-find-microplastics-in-marine-life-in-wellington-harbour.html>

⁵
<https://www.newshub.co.nz/home/new-zealand/2022/12/airborne-microplastics-equivalent-of-3-million-plastic-bottles-per-year-found-in-auckland-s-atmosphere.html>

⁶
<https://www.theguardian.com/environment/2022/mar/24/microplastics-found-in-human-blood-for-first-time>

From this research I have realised that I need to be very aware of what materials I am using so that I don't cause harm to the things around me. I will also carefully wash my finished garments so that unnecessary microplastics aren't released. Another thing I will be doing is making sure my washing machine has a filter to catch any that are released from other clothes I own.

Life Cycle of a Garment



1. It is vital to look at all the aspects of how a fabric was made when selecting it for use in making a garment. The factories that manufacture fabric are massive contributors to the horrible negative environmental consequences due to the chemicals used, and the fibre sources - as well as the pollution that treating these fibres cause. One must be mindful that the fabric selected hasn't caused environmental problems when being made, and also won't cause any in future.
2. The construction process is something to be mindful of if buying a garment already made - as one must be careful not to accidentally support unethical practices such as child labour or other general ill treatment of people and animals. It is much simpler to ensure humane ethics and sustainability, ensuring the construction process when making your own clothes as you do it yourself and can use methods that suit you, and there are no unknown factors to worry about.
3. Washing garments, in most cases, happens a lot of times during its lifetime. Some may think that a garment's environmental impact is only made during its construction and then final disposal, but this is untrue. Washing garments uses power and water, these both being things that impact on the environment. The washing also can release microplastics into the water which can be very harmful, as mentioned earlier. This is why it is so important to consider things such as cleaning products used, water temperature, frequency of washes, and whether things need to be hand or machine washed.
4. Mending garments is something that tends to happen less frequently than it should. Mending is a great way of extending the life of a garment, it can be done subtly to hide holes or replace buttons, or also creatively which in addition to fixing any issues, can make it look more creative and unique. It is always a good idea to mend clothes if possible, this makes the most use of it and delays its time before being put into landfill. The issue in the society around me is that lots of the time people don't have the basic skills necessary to do this themselves, so end up disposing of clothes before they have been worn to their maximum potential.

5. Recycling garments is a great idea if the garment cannot be used for its original use anymore. The material however, might be ok, so can be cut up and used for rags or other things like bags. Upcycling is very similar, but is basically just altering the garment into a new look which is still wearable. This can include things like cropping tops, adding patches, embroidering, painting and many more things. Upcycling is often a great alternative to fast fashion as it can mean you can keep up with current trends and have that instant gratification of a new piece of clothing, without it harming the environment or people.
6. When a garment has been used to its maximum potential, whether it has had multiple lives after being donated, has then been mended, as well as then being re/upcycled - it is then disposed of. The nature of the disposal depends on the material, but the majority of the time this just means being put into landfill.

Fabric production is a very important thing to consider when buying fabric or even buying a ready made garment, as there are many things that go into making fabric and these are often very unethical and not sustainable. People generally don't consider this when purchasing clothes, but it is important to take the time to stop, think, and research before purchasing if one wants to not harm anyone or the environment. This also includes animal welfare, as they often get treated badly in the process of making different materials.

Harm to the environment:

Fabric production requires significant amounts of natural resources such as water, energy, and raw materials. The cultivation of fibres like cotton and the production of synthetic fibres like polyester both require large quantities of water and energy. One of the most well known negative environmental effects of fabric production is the water pollution. The dyeing and finishing processes involve the use of chemicals, many of which are hazardous and can contaminate water sources. These pollutants, including heavy metals and toxic substances, can cause serious harm to aquatic ecosystems and also risk human health if consumed. Improper handling and disposal of chemicals can also lead to water and soil contamination

Fabric production also uses significant amounts of energy, mainly in the form of electricity and heat. This energy generally produces greenhouse gases, which damages the ozone and is just in general bad for the environment. There is also significant waste created. This includes the disposal of plant matter after fibre extraction, trimmings and scraps during manufacturing, and the discarding of unused or defective fabric. This waste ends up in landfill most of the time. They often will then release even more greenhouse gases as they decompose. The production of natural fibres, such as cotton and rayon, can lead to deforestation and habitat destruction, as large scale harvesting of these fibres often requires the clearing of forests, which contributes to biodiversity loss and disrupts ecosystems

Harm to animals:

It is really sad and concerning that often animals are harmed or killed for the sake of fabrics like leather, fur, and silk. The harvesting of these materials is awful, The International Humane Society estimates around one hundred million animals are bred and killed to supply the fashion industry each year⁷. Sometimes the animal materials used for fashion are sourced somewhat ethically as the entire animals are being used and not wasted - such as meat and other materials. The skins/furs would be wasted otherwise. This still does not justify the killing of the animal to begin with, and often the animal doesn't even have a good life before being killed as they are bred in masses with terrible living conditions. Another issue is that the polluted water from making and dying fabrics can be very harmful to any animals nearby that depend on these water sources that are now no longer pure. Knowing this is important when designing due to my strong belief in animal rights and welfare. I now know to be cautious of what animals could be harmed during fabric production, and I will avoid using these. I am very passionate about this - *I do not* want to support animal harm in any way.

Harm to others:

The fashion industry is known for its mistreatment of workers, though this is commonly only considered in the context of construction workers. People don't realise that the mistreatment of workers can start as early in the process as fabric production. Workers are put at risk in factories, exposed to extreme chemicals, worked long hours, and paid very little. Harvesting the materials to make fabrics also tends to have some very unethical practices. People in poverty are more susceptible to forced labour. Cotton picking is something that is often being done by people who have no other choice - this often is done by children for long hours with extremely concerning pay rates⁸. Cotton pickers are not typically provided gloves or protective clothing to protect them from pesticides or other hazards. An estimated 300 million people work in the cotton industry- one of the largest agricultural industries in the world. It is about time people start considering these struggles that people face when selecting their fabrics, so they are not supporting unethical practices - and instead increasing demand for fair trade goods⁹. I need to be considering the treatment of workers who made my fabrics that I will use, but I do not need to worry about the ones used in the construction process as I will be the one making my own garments so I can personally ensure I am being responsible.

7

<https://www.hsi.org/news-resources/fur-trade/#:~:text=Each%20year%2C%20around%20one%20hund,of%20other%20clothing%20and%20accessories>.

8

<https://www.hrw.org/report/2017/06/27/we-cant-refuse-pick-cotton/forced-and-child-labor-linked-world-bank-group>

9

<https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-cotton-industry-fact-sheet.pdf?sfvrsn=2>

Fast vs Slow Fashion

I will ensure that my garment is a slow fashion garment. As a designer, I need to understand the difference between fast and slow fashion so that I can make the best garments I can and will know how to implement this when making my garment.

Fast fashion refers to the production and marketing of inexpensive clothing that is quickly and cheaply produced to meet the demands of current fashion trends. Most clothing at common retail stores in malls are fast fashion - some key examples being Glassons and H&M. These sorts of stores are renowned for their rapidly quick turnover of new looks, successfully keeping up with the ever changing trends within the industry. They prioritise speed and affordability over quality and sustainability. These brands often target younger consumers who want to keep up with the latest fashion trends while spending as little as possible. To do this involves producing garments in large quantities at low costs, and often in developing countries with cheap labour so that the final costs are also kept low for consumers. Cheaply made garments are often of lower quality and have shorter lifespans, contributing to the problem of textile waste.

Fast fashion is the reason for the massive increase in the number of garments produced worldwide. Howgego highly recommends that people start viewing clothing as a not a one-off purchase, but as a service you draw off if needed. Fast fashion is pretty much just the practice of supplying mass numbers of low quality, but trendy garments, without caring about any sustainable and ethical considerations. A consequence of their low quality is that they have a very short lifespan, and therefore end up in landfill very quickly. This is very harmful because most garments are made from synthetic fibres or blended materials that do not biodegrade easily. As a result, they can take decades or even centuries to decompose, releasing harmful greenhouse gases like methane during the process. This is also a waste of resources, all the energy and resources invested in the production of the garment is wasted.

Slow fashion is the much more sustainable and ethical alternative to Fast Fashion. There, of course, are a spectrum of brands that don't just fall under one category or the other - there is a lot of middle ground. Some brands may have some very slow and sustainable garments but also a range of fast fashion. It is important to be mindful of this, as even if you have heard that a brand was particularly good for one thing, that doesn't mean that it applies to all of their garments. Slow fashion advocates for the use of environmentally friendly and renewable materials, such as organic cotton, hemp, bamboo, and recycled fabrics. It encourages reducing reliance on non-renewable resources and minimising the carbon footprint associated with clothing production. Slow fashion favours classic and timeless designs that are not tied to quickly changing trends. By creating garments that can be worn for a longer time, it aims to reduce the pressure to constantly buy new clothes and encourages a more sustainable and personal style. It also is generally very well made, with clever

construction that prioritises durability so that garments have a very long closet life and will not be discarded quickly.

Overall, slow fashion seeks to create a more sustainable and ethical fashion industry by fostering a deeper connection between consumers, clothing, and the environment. It encourages a shift towards responsible production and consumption practices that have a reduced impact on the planet and the people involved in the fashion supply chain.

As a designer I am going to ensure that my garments are slow fashion for the reason stated previously. I do not want my garments to be badly made as they would then be discarded quickly and contribute to landfill. I will try and ensure my designs are timeless and are not inspired by micro trends that will pass quickly, meaning I do not like them in a short while, and other people would not want them in future if I ever donated them.

And the main thing I am going to do is prioritise sustainability and ethics in the entire design and construction process so that my garments do not add to the sadly massive negative impact that the fashion industry already has on the world.

Sustainability/Ethics Feedback	
Stakeholder	Feedback
██████ (Pattern Maker)	This is a massive issue and it's good to see you (and hopefully your generation) are taking it seriously. Being able to design and create your own clothes is the best way to express your fashion creativity on a budget while keeping in mind the ethics and sustainability issues you have raised. Shocking that microplastics were found in almost 80% of the people tested.
██████ (Sister)	I didn't know that some of those brands I love are so bad for the environment and stuff, that is kinda interesting and I feel like more people should know about it. It's really cool that you're gonna make something that isn't bad for people or the environment - definitely do this.
██████ (Fashion Teacher)	Well researched ██████. It is good to see that you have researched widely. Many of your points, including especially those on microplastics are very important and are limiting factors. It is a strategic turning point for fashion consumers and producers to ensure that they take responsibility and are informed of the steps they can take and why. You need to justify why your specifications allow a judgement of the outcomes fitness for purpose in the broadest sense.

Needs and Opportunities


As the designer and also the client for this project I have been able to conduct research into what would be a beneficial addition to my wardrobe. Looking at my

wardrobe in its current form, I can see that I don't have any major gaps since I love clothes so therefore make and buy a lot. Therefore, for this project to be beneficial to me, I really need to be making something that I will get lots of use out of, so it must be something I really like. Especially from looking at the photos of my outfits, I can see an obvious pattern of mini skirts, so I would love to make one of these. I have mentioned that I don't like dresses very much, and this is partly because they are restricting, as if I like part of it, I can't then just wear that part - e.g. the skirt, with something else. I also have noticed that I love jumpsuits, and don't have any summer appropriate ones. Because of this, I have decided that I will make a top to match the skirt, that I can wear together to give the illusion of a dress - so giving me the cohesive monochrome look of a jumpsuit, while the practicality of it being two piece. Being two piece also allows me the option to pair either the top or skirt with any other existing pieces of my wardrobe for even more potential wear.

By making a few garments for this course at school I will have the exciting opportunity to make something specific as well as ensure that they are sustainable and ethical. I am really excited to take this opportunity to make a garment perfect for me. I love that I get to make the most of learning about sustainability and ethics to ensure my own garments will be sustainable and ethical. This sadly is something that is really hard to ensure when buying clothes new from other places, as many brands are not transparent, so I am glad I will be able to make sure of this for the garments I make myself. I have been able to look at what I would like to have in my wardrobe so that my garments can be whatever I want them to be, this opportunity allowing me freedom, while still ensuring my outcome will be beneficial to me. By doing lots of research for this, I have been given the opportunity to expand my knowledge on this subject. As well as being useful for this NCEA course, it is also great knowledge to be able to apply in all aspects of my life. It includes vital information that many people don't know, so I have already been given opportunities to help teach others and give them the opportunities to stick to their own personal morals with their fashion endeavours.

Another great opportunity from this is that I am given a lot of time to do this and work on my sewing skills. This is something I love to do, and really want to develop my technical abilities. My issue is that I get very busy so don't get much time to work on it at home, so I am delighted to be given this opportunity to improve myself and learn about this topic that interests me so much in class time

I did a brainstorm to try and figure out potential options. Doing this gave me the opportunity to think a bit more broadly about projects I could take on this year, and helped me to narrow down what I wanted. I want to go with the option on the left: making multiple garments that go together, but could also be worn apart. Since I have limited time, I have decided that for the sake of making each garment at its highest possible quality, I will make two garments, not three. These garments will be a skirt and a top, made out of the same fabric. When worn together they will look like



a dress, but so they get more wear and are more versatile, they will also be easily paired with other items I already own.

Issue:


To summarise, from my research I have concluded that my issue is that I need some garments to wear in my environment next year at university in Christchurch. I have decided that the garments I design and construct will be a top and skirt that match. I have decided these will be useful to me as this fills a slight gap in my wardrobe and can be worn in many different situations - which is great as versatility is important to me. When designing them I will be conscious of things such as my body type and ideal colours based on my personal colour palette, while mostly just suiting them to my personal style and taste.

Risk Identification

Strikes:

This year has been made difficult due to teacher strikes. I have had lots of days off school where I have had to work from home. This has negatively impacted my learning significantly because during this time I cannot get help from teachers if I try to work from home, or some subjects I cannot do at all from home. If the strikes continue into the time when I am practically making my garments/technological modelling then the strikes could make the time frame very difficult. In preparation for this possibility, I will make sure I try to stay ahead in class so I have room for if I have to work less in future.

Sickness/ Covid:

Just like with the last few years, COVID is still around and a very possible risk. This has affected people nationally, and globally. When I got COVID last year I was seriously affected and out of school for many weeks. I fear that the same would happen if I got it again, so I need to be mindful of the fact that I could potentially end up having to take lots of time off school where I wouldn't be able to continue working. Another effect of being off school for an extended amount of time would be that I wouldn't be able to get constant and direct feedback from my stakeholders as my communication would be far more limited. The effects of this would be that I wouldn't be able to accurately gauge their reactions - especially from my teacher, .

Though this is especially relevant to COVID, it also goes for any sickness that I could get this year.

- Leadership:

I am a student leader in my school and often this means I have to sacrifice class time to attend meetings, run events, workshops, and courses. Just like with the strikes, and sickness, this is a risk to me because it threatens my ability to meet deadlines because it can potentially mean I have less dedicated class time to meet the same deadlines. I know that my school work is still important and the senior staff are aware that if student work needs to be prioritised then that can be done - I just need to remember to let them know instead of trying to do everything and failing to do so.

- Budget:

I am still living at home so don't have significant living costs to cover, and I do do casual work sometimes on the weekends. This means I have a little bit of money, but not much - so the overall cost of materials for my garments could be a risk. I will need to consider this while designing as I want my garments to be the best quality and to do this, I need to not be using cheaper fabrics than should be required because the outcome will be compromised.

- Risk to others

Risk to others if not properly handling sustainability and ethics:

I have talked about sustainability and ethics a considerable amount already, but I cannot stress enough how important they are. I am mentioning them again here because if I do not consider them properly then I am being a risk to others. This includes the harm for workers at factories if people such as myself continue to support these unethical practices. The reality is that if there wasn't demand for these cheap unethical materials then the factories wouldn't be able to function, so the unethical behaviour would have no choice but to stop. It also includes the risk to people and animals that are affected by the toxic dyes used to colour some types of fabric. Also, beyond risk, the definite harm to animals when their products are used such as furs or skins. These considerations are a constraint to me as they limit what materials I can use, though I don't mind having this constraint as by having it I'm ensuring my garment is sustainable and ethical which, of course, is very important.

- Physical Risk:

When physically making my garments I need to consider the physical risk, as I will be using equipment and tools that could potentially be a risk to myself. This includes cutting myself with scissors, sewing over fingers, needles breaking and flicking into me, overlocker blade, and potential others. I will need to avoid these risks by making sure I have clear instructions on how to use things, and just being extremely careful.

- Summary:

It is important that I acknowledge and face these risks now before continuing with the design process - and further. Though it takes time now, it could potentially save me a lot of time in future as I will not need to backtrack or rush things further down the track. By thinking about these things now, I can create my concept designs with these risks in mind which will minimise the chances of them negatively impacting me.

Initial Research of Existing Garments:

I have decided that I want to make an outfit that is made from all the same fabric - it will be monochromatic. I noticed this was something I loved when I was looking through my wardrobe analysis. I love jumpsuits as they are all one colour, and I like wearing tops and pants that are the same colour or even material if I can. The thing with jumpsuits is that since they are just one item of clothing, there aren't that many different ways it can be styled, so it is not always very versatile, or mine aren't at least. I want to do some research to explore ways I can have a look that can be worn by itself (so without extra pieces such as an added singlet or shorts) but could also be worn in some kind of other way such as potentially having detachable pieces or just two separate garments that could be worn apart or together.

I first tried to research dresses that separate into a skirt and top. This was unsuccessful, I literally couldn't find any. Everything that I found were just two piece sets, that sometimes could be worn so that they covered each other in the middle so it looked like a dress, even if they didn't actually join in any way. This made me realise that this is probably a more practical way of doing it than I was thinking anyway. Unless I wanted the dress to be very loose fitting, then there isn't any point really in making it join, since this would just limit mobility and also add unnecessary complications as it would require extra fastenings such as zips or buttons or something. I then just looked at some dresses, tops, and other things to get inspiration.

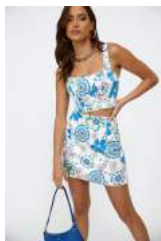


1. I love this top, I think it is a really interesting and unique shape. It is made of a muted dark green woven material, with a halter neck, collar, and fitted shape. The back neck has a clasp that can open and close to allow an easy way to take it on and off. The colours are really nice, I think I would wear this sort of thing. The length is good, as a high waisted skirt would fit nicely underneath - making the complete set look like a dress. A particularly interesting design feature of this top are the four diagonal straps on each side. These actually gave me an idea - I cannot tell if this is what's already happening in the photo, but the straps could be adjustable. These could be recycled from somewhere, e.g. old belts, seatbelts, watch straps, or that kind of thing. Having these straps adjustable would also be great for sustainability as they could allow for me to grow so I am less likely to dispose of it after a year or so if I happen to grow. This would also mean that if I ever donated it after I didn't want it anymore, it would have more chance of fitting people. I know that often if I am second hand shopping, I struggle to find things that fit me, and that if more garments were adjustable then they would have more chance of having a second life. For this to work, the panel underneath the adjustable strap would need to be stretch material.



2. This dress is from the D&G at Milan Fashion Week, Spring 2010. The way that the skirt flares out from the hips not the waist is stunning, and very flattering. I have a similar body type to that of the model wearing it in this picture, so I think it will suit me. This look is something that I can take inspiration from for my top and skirt as the dress has that look about it. I can see how this could be split into a skirt and top itself, as the waistband of the skirt could just sit under the hem of the top, it could be mid or high rise since the top is very long. The ruffles could be good since these sorts of ruffles are made from long rectangles, rather than curves. This means that I can cut them alongside each other which minimises waste of fabric, this being very important.

This kind of dress is great with the light weight fabric as it works for summer, but could easily be worn over a long sleeve fitted top and tights, with a coat for winter. It could also be worn with boots and a sweater for more casual days, or dressed up with heels and jewellery for wearing out at night or to semi-formal events. I really love the length of this skirt so would love to do one similar



3. These sorts of two piece sets are very common, but are definitely not the kind of thing I want to make. When researching two piece sets, these were by far the most popular thing to show up. This set has a bright pattern, and a very simple shape. The top is cropped, so when bent over (like the model is), the top touches the skirt, but usually it wouldn't. I would not wear a pattern such as this. I think that these sorts of patterns only look good when matched together. This can be achieved through clever cutting - at the expense of inefficient fabric use. To get the patterns to connect, the pieces of fabric have to be cut in specific places, rather than just what is most efficient. This is not very environmentally friendly, and since I do not want the patterns not to line up, I will not be using a patterned fabric. I don't like the skirt shape either, the length is very unflattering. I prefer a mini length, or knee length.

4. This skirt is interesting, and I was very pleased to find this photo, because I had an idea like this in my head. I had been thinking about how waistlines of lower half garments, whether those be pants, skirts, or shorts, go through trends. Over periods of time, high waisted things are very common and popular, and then a decade later, low waisted things are back in fashion. I considered this for a while as trends such as this are fascinating. Right now, I love the look of low waisted things, and what is funny about this is that I know a few years ago I *hated* anything that wasn't super high waisted. This seems minor at first, but once I considered this, it made me think: If I love low waisted things now, who's to say that I won't hate it in a year or two? I never thought I would have changed my opinion on it in the first place, and I did - so why not again? Though changing my mind on things isn't necessarily a bad thing, the problem is that if I made something low waisted and then decided after a while that I didn't like it anymore like that, then suddenly it wouldn't get much use anymore and would have



been a bit of a waste of my time and materials. Also, since my opinions could have changed due to social trends, other people probably wouldn't want it either. This gave me the idea that I could make something that could be both. It could have some way to change from high to low waisted, in a simple way, that looked good in both forms. This photo shows a skirt that can do just that. As it is, it is worn low/mid rise, but if she turned the waistband up, it could become high waisted. This works effectively because the material that was used for the waistband was stretched, so it was able to adapt to the significant change of size of the waist compared to the hips.



5. This top has lots of interesting little design features, done for practicality and also for aesthetic purposes. This top has two breast pockets, adjustable straps due to dromedaries, and seam detailing for a fitted look. Though not super obvious in this picture, there is a lace up section in the centre front. This is another way to make it adjustable. This wouldn't be the way to get in and out of the top, it would need to have something else like a zip at the side or back. The lace up section would be for the sake of getting a perfect fit, as it could be laced up tighter in places, and more loose in places so that it looks right. Also, similar to number 1, this would be very beneficial for if it was ever donated as it would have more of a chance of fitting other people if they wanted it.



6. I then decided that the adjustable aspect of a garment really interests me and could work really well for me as it allows more versatility. This top is an example of a way a top can be made adjustable to allow it to be different lengths. This is done with a cord stitched into a channel. The fabric can be pushed up and the cord tied to create a ruched effect. This gives a cool look, but also allows easy customizability, as people can adjust the length of the top to whatever they would like for their own personal level of modesty. Since I want my top to be a long length, this wouldn't work for me, but the idea of having the length be adjustable could be applied to a skirt. With multiple ruched strips around the skirt – like maybe six – this could work to take up the length of the skirt, or to adjust where the waistband sits.

7. When thinking about other ways to make things adjustable, I went back to the first idea with the buckles on the sides. This got me thinking about other sorts of common buckles such as these on tramping packs. For them to be effective on tramping packs they must be very durable as they cope with wearer and wear. They are also easy to adjust. These are both qualities that would be good to have if I were to put an adjustable buckle onto either of my garments. They work by having one end of a strap in one part of the buckle, attached in, and the second strap looped through the second part of the buckle mechanism. The two parts of the buckle clip into each other, but can be easily



released when pressure is applied from both sides of the clasp. To be tightened, the second strap can be pulled or pushed through the second buckle piece, though when being used it has pressure on it which stops the strap from being able to slide through. This works well because it can be easily adjusted when needed, but won't come undone while being used.

From this research I have realised a few things. I have confirmed that I want to make a top and skirt. I don't have specific ideas for the top yet except that it will be fitting, and a length that sits below my waist. I love the idea of it being very adjustable, so maybe with some sort of side straps, lace up, or shoulder straps that can be adjusted. The skirt will be a mini length (like photo 2), and I really like the idea of it also having some kind of adjustable element, whether that be for the purpose of fit or just for the option of two different styles. I could use inspiration from other items that have adjustable elements such as the buckle on the tramping pack.

Initial Research Feedback	
Stakeholder	Feedback
██████ I (Pattern Maker)	It's really interesting to read about how your ideas evolved as you did more research. Love that you are taking inspiration from from a tramping pack too. As you have discovered, great ideas don't need to all come from other clothes. It may be possible to find straps or fastenings from secondhand shops either on pre-loved clothes or other items.
██████ (Sister)	These are really cool, I didn't even think you could look at things that aren't clothes but that's actually a good idea.
██████████ (Fashion Teacher)	The dress from fashion week is great and would really suit your style. Good focused research here, ██████. Targeted following your extensive research. The skirt that can be adjusted is insightful - really like the 2 separate looks in the one garment and the reflection in trends and how you can mitigate this with a simple alternative option. The top with switchable options is also very clever.

This feedback has helped to confirm that these items/clothes are relevant to my project which is good as it stops me from getting sidetracked and wasting time on things that won't benefit me. I think ██████ suggestion of shopping second hand for fastenings is a very good one, I know it can be hard to find good quality material second hand but often clothes will still have straps or fastenings in good condition. Also, ██████████ comment about switchable options is one I love and will try to explore more.

Key Considerations

I need to identify some key considerations that my garments must have before I start my conceptual designs so that I ensure I include them into the designs during this process. This helps to make sure my garments are appropriate and fit for purpose - while minimising risk. Basically, by identifying the key considerations now, I can have the best chance at designing and making garments that will be the most optimal.

- I will be designing two garments that make a full outfit. They will be coherent together, while also able to be easily paired with other pieces I already own.
- The garments will be colours that look good together. I will consider how the colours compliment my personal colour palette, but also not restrict myself.
- My garments need to serve their purpose to me. This means being appropriate for a variety of weather conditions since my context (Christchurch) is very varied. I also need to be able to wear these garments often so I need them to be socially and culturally acceptable.
- Ethics and sustainability need to be on the front of my mind when designing as this is something I will need to work hard to achieve. This is a challenge because of limited access to sustainable and ethical fabrics and other items.

Key Considerations Feedback	
Stakeholder	Feedback
<div></div> (Fashion Teacher)	You are clearly synthesising information and integrating in terms of ingenuity, simplicity, sheer optimism and technological practice. Clear justification of why your outcome addresses your problem or need.

Initial Brief

As I have previously described, I am going to be designing and constructing a matching skirt and top that can be worn together and apart. This design will be for myself to wear - specifically next year while living in Christchurch. This project is an opportunity for me to provide myself with these finished garments to add to my wardrobe and benefit me in that way, but also to develop myself as a designer and learn more about sustainable fashion. As outlined in my analysis of the social and physical environments, my design will need to be suitable for both of these otherwise it will not be practical, which would consequently mean I wouldn't wear it so would not meet its purpose.

Attributes:

- The aesthetic of the garments are visually appealing and suited to my personal tastes, body type, and colour palette
- The two garments can be worn together or separately
- Socially acceptable

- Can be dressed up or down to different situations
- Easy to take on and off

Specifications:

- Finished in time to submit for assessment (20/10/23)
- Made out of materials that are sustainable and ethical
- Fits my measurements
- Can be made with a standard sewing machine and overlocker
- Able to be washed in a standard washing machine

Constraints:

- Time is certainly a constraint as I have to have it done so that it can be handed in for assessment.
- Lack of sustainable and ethical materials. It is difficult to know for sure if materials are actually sustainable and ethical, sometimes even when they say they are so this can make it very hard. As a student I do not have access to the resources and supplies that industry professionals have, so I will have to make do with what I can source around me, but this is very limited.

Conceptual Ideas



I tried to explore a few different ideas in this section of my design development. This was in an effort to find some sort of starting point to develop my final design from. I designed with the conclusions I had made from my research in mind - so my designs will be as relevant as possible. I also was considering my stakeholders and

whether they would agree that the garments were socially and culturally appropriate for my environment next year. I played with the ideas of the garments having adjustable aspects to them for visual diversity and also for fit purposes. I also considered the look of the sorts of fabrics I would be using since I am limited - in a

good way - as I am trying to be as sustainable as possible. I need to consider the shapes of the pattern pieces I will need, as these will determine the amount of fabric I potentially have to waste when cutting.

Initial Ideas Feedback	
Stakeholder	Feedback
█ (Pattern Maker)	I can see the influence of the things you liked in your initial research coming through in these designs. The straps and the adjustability are common features in your concepts. I look forward to seeing how you develop these ideas further. Be careful that the adjustability of the design doesn't take away from the aesthetic of the garment. Great concepts though!
█ (Sister)	I like the top marked number 1, the detail would really suit you. Also it looks hard to make and I think a challenge like that could be really good and would push you.
█ (Fashion Teacher)	Some great ideas here █ as a starting point.

First Sketch

For this first look I explored a military style top, in the sense that it has lots of pockets, seams, and *materials (similar to number 5 that I researched)*. I especially like the strap attachments on this, I think having the length being adjustable, but in a cool looking way would be great. I don't like the look of normal way adjustable straps are done with rings and sliders, as this is clearly done for only a functional purpose and is made to blend in. It does not fully blend in of course though, so you can clearly see that they are just an ugly looking piece of plastic/metal, not an intentional design feature. If my straps are going to be adjustable, they will be done in a way such as this, with buttons or domes, in a very obvious place, so that they add to the look rather than taking away from it. Other things on this design: I like the functionality and look of the four pockets, and there are plenty of seams meaning the pattern pieces have good potential to be fit together like a puzzle when cutting so that there is minimal waste.

The skirt for this look is a mini length. It has pockets which are great as they would make it useful if I need to carry things such as my phone; I would need to make sure that it fits. I am more likely to wear a garment if it is useful as well as just a pleasing aesthetic, so this would definitely make it more fit to purpose as I would get more wear out of it. The skirt however, is probably about a half circle skirt. This looks great, but the problem with it is that this would mean the pattern has large curves on it which nothing else can line up with, so means there ends up being a lot of excess fabric wasted after cutting. This skirt also doesn't have any adjustable elements so this probably won't end up being a design I take any further, at least without a lot of changes which would mean basically reinventing the entire thing.

Second Sketch

For the second idea I was exploring, I was investigating the idea I got from research number 1 with the adjustable straps on the sides. This top has a halter neck with a collar. It is hip length, and has potential for some kind of decorative feature at the centre front, this could be some kind of recycled item such as a chain or clasp. Having a recycled feature like this would be really good because I could source the items from places that would usually just dispose of such things, so I could save them from landfill, therefore being sustainable. The straps at the sides could also be some kind of recycled item as briefly discussed during my research. I really like this idea as it gives a pleasing aesthetic that I really like so I would be likely to wear it, it gives it an adjustable element so that it can fit me even if my body changes, or fit other people if I give it to someone else or donate it once I am finished with it. The skirt with this second look isn't great. I like the shape of the seams in the yoke, but other than that there is nothing special. It has the same issues as the skirt from the first look since it would be cut with big curves so wouldn't be a responsible use of fabric due to the waste created, and this skirt doesn't even have pockets. It has no adjustable elements either, so now after considering it, I can rule it out as an option. The only thing I would potentially use from it would be the seams of the yoke.

Third Sketch

When sketching this idea, I was thinking about the fact that I wanted the top and skirt to sit on top of each other to look like a dress when worn together, so this got me thinking: what would it be like if when worn together I could actually join them in some way. This would then allow me to have the silhouette of the look to be less fitted, since if they were separate, for the skirt to stay up it must be tight at either the waist or hips. For this sketch I thought I could have a loose fit, while still incorporating the pocket and seam detailing that I like. I don't like buttons on a tight garment as they often tend to pull apart and not look very nice, but since this wouldn't be tight I put buttons down the centre front as a way to get in and out of it. The skirt part of it is gathered from a rectangle, therefore not wasting fabric when cutting. The issue I realised with this look though, is that it would be difficult for it to detach. I could have an open ended zip, though the join could be difficult at the end of it. I could do velcro, though this probably wouldn't be very strong and doesn't last well with wear and washing. Another option would be domes all the way around. Even if I found a good way to make the skirt detachable, there is still another issue. Since the skirt had to be wider where it attaches to the top than normal - to achieve the look I want - when not being held up by the top, the skirt would not stay up. I would need to incorporate some way to tighten the waist of the skirt once it is not attached to the top. This could be a drawstring maybe, or the addition of a belt. This would take away from the look of the skirt though I think, and I don't think the top would also look very good just by itself. Because of all this, I think I will not go with this idea of having the skirt and top actually be able to attach since there are a lot more aspects that I hadn't considered that I don't think will work well or have the desired look.

Fourth and Fifth Sketch

These were just done quickly to get a couple of ideas out of my head so I could understand them better. The top was so that I could see what it would look like with a buckle on the front so that it could be adjustable. I do really like this shape, I then thought about the fact that it would be heavy to have a buckle in that place, and I don't think it would look right if I added straps as part of what makes the buckle look cool is that it's strapless. Because of this, I decided not to develop this look any further as it would be a waste of time. The only other part of this that I like is the shaped seams on the bodice meaning it fits nicely to the body. The other thing I sketched here was the skirt, this was me trying to think of another way for the skirt with the waistband that folds over to work. I thought that I could maybe have a different fabric in the lining of the skirt so that when it folds over it is a different colour.

Sixth Sketch

This skirt is my favourite thing I designed so far. In terms of fabric usage, I have determined that I don't want to cut a skirt on a curve as this creates fabric waste, but so far I only looked at gathering as an alternative. I then thought about what else I could do and came to the conclusion of pleating. I really like this idea because I love the look of it much more than gathering, since I can control it a bit more and can make it sit flatter to my body which I like. I could do some cool design things like make some pleats different shapes and distances apart - this isn't shown in the drawing but I will experiment with this in more drawings in future. My favourite part of this sketch, however, is the detail on the yoke. These details are to allow the skirt to be worn high waisted, and also low waisted, and I have done this in a way so that the skirt length can stay the same at either option. This is important to me as if the skirt had to be longer to be worn low waisted, I probably wouldn't wear it. To do this I would put multiple channels vertically down the yoke, and these would have strips of cotton tape inside them with lots of button holes fairly close together down them. These pieces of tape would hang down when the skirt is being worn high waisted. When I want to wear the skirt low waisted though, the yoke would be shortened by pulling the tape through the channels. There would be a button at the bottom of the channel which I would put through the button holes on the tape. Once I thought this through though, I realised that this would be more complicated than just this since the waist measurement would be smaller than the hips, it would not be able to be worn any lower so would need another adjustable element to allow the tape + button + channel thing to work successfully. I had the idea to put a clip at each side of the waist that would be done up when worn high waisted, but undone when low waisted. The pattern would be designed so it fits perfectly when low waisted, and then the excess fabric at the waist would just be folded under the clip when it is done up (high waisted). This clip could potentially be recycled and the style of the ones on the tramping pack I researched (number 7).

Concept 1



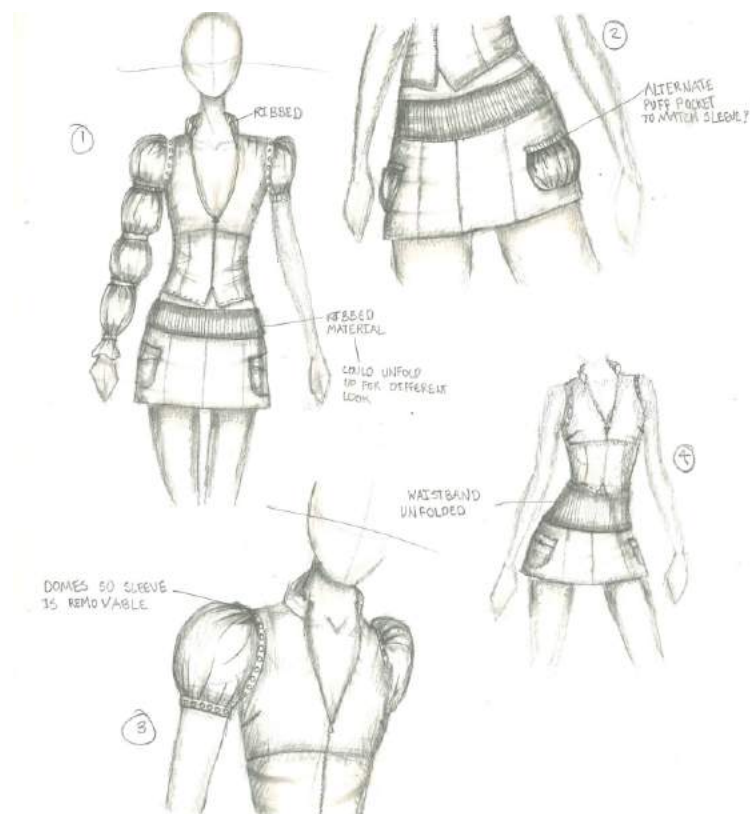
Concept 1 Feedback	
Stakeholder	Feedback
<div></div> (Pattern Maker)	<p>Nice silhouette. The ruffles in the skirt work well under the fitting bodice. There is something bird-like in the way the skirt ruffles get longer at the centre back.</p> <p>I see the laces in the top, and you mention the top having a side zip, but have you thought about what sort of opening the skirt part would have? Tricky with the ruffles.....</p> <p>I like your thinking around having a modesty strip behind the lacing.</p>
<div></div> (Sister)	<p>It's very you, I can see you wearing this. It's def you kinda thing.</p>
<div></div> (Fashion Teacher)	<p>Very versatile, like the range of adjustments. A great option for both the skirt and top. Could be worn separately. I like the range of size variation that you have factored into the designs. You have a range of complex procedures required for the standard</p>

	at this level. Economical use of fabric and transposing adjustments into added design features.
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This concept is based around a top that sits over top of a skirt. The top has a halter neck, made adjustable by the fact that it attaches to the front of the bodice with a button. The button is on the top itself, and the strap has lots of button holes on it so that it can be attached at the desired length. The straps would be made longer than necessary so they hang down the front as a visual design feature. The width of the top is also adjustable due to the lace up section in the centre front, inspired by my research (number 5), which also had a lace up front. This could be worn with it tightly laced for a tight fit or on a smaller person. Or loosely laced on a bigger person or for a less fitted look on a smaller person. To make this top more wearable, I would put a modesty strip behind the lace up section. This would either need to be stretch material or just a wider piece of woven that then bunches up when tied tightly. This is the kind of thing I wouldn't usually worry about since I am comfortable showing skin, but to make it more appropriate for more situations and therefore making it more versatile, I would choose to cover more. To get into this top I would put a zip down the side seam, I have the option of using the front lace up section to get into it but I think this would be more difficult and take more time, so might limit how often I wear it since I might not be bothered to put in the effort to put it on. That is the reason why I will do the zip instead. It also has two pockets on the front, for the purpose of aesthetics mostly, but I would also make them functional.

The skirt is four tiered and ruffled. The top tier would attach to a wide elastic waistband (not shown in drawings as it would be hidden under the top), to allow easy wear. The ruffles - like the D&G dress I researched (number 2). Would be cut from rectangles so that they conserve fabric waste. A negative about this skirt design is that it wouldn't be able to be worn both low or high waisted, so isn't as versatile or timeless.

Concept 2



Concept 2 Feedback	
Stakeholder	Feedback
█ (Pattern Maker)	<p>Such a versatile design! It looks like you have considered that for this top to be very fitting it needs plenty of seams/ panels and darts - good work! Having all of these smaller pieces would mean you can achieve less fabric waste which was one of the issues you have mentioned you are concerned about.</p> <p>The stretch in the waistband would be good for when you've been out for a big dinner. Nothing more uncomfortable than a waistband that's too firm.</p> <p>It's clever that the gathered up look of the pockets reflects the waistband gathering and also the gathers in the sleeve.</p> <p>Perhaps it would be nice if the angle of the pockets was parallel with the front hem of the top.</p>
█ (Sister)	Sleeves are super cool, the ribbed material might not look nice next to other material though so be careful with that.
█ (Fashion Teacher)	<p>█, this is amazing. You have communicated convincingly to justify why this concept addresses the issues. Very innovative and a lot of thought and synthesis given to your ideas. It is versatile with the option of two garments. The adjustable halter neck strap with multiple button holes, the top with the lace up feature allowing variable widths, sizing and different looks,, and the insertion of the modesty strip allow for the dress to be used by a wider range of clients and contexts. The insertion of a zip makes it a great easy option and addresses the fact that we are all very busy people and the time taken to get it sitting right may limit its functionality in your wardrobe. The 2 pockets are great for functionality of the wearer. Good consideration given to the conservation of material in the cutting phase. The sleeve concept is exciting and I will be interested to see where you take this idea as it has great potential to dress up and down and transform your possible garments and looks for a range of context.</p>

For this design I really explored the concept of really creating something versatile, and to do this I thought maybe a garment could have a detachable element so that an aspect of it can be added or removed for different purposes or situations - for example to adapt to a change of weather. This look is a miniskirt with pockets and a ribbed waistband, and a zip front shirt with a mandarin collar and detachable sleeves.

The skirt is fitted and at the mini length that I love and would get lots of use out of. The ribbed waistband is the key part of the skirt as it gives it an exciting feature. The ribbed waistband would have two purposes, the first to make it more comfortable so it would then stretch if necessary - for example when sitting. The second purpose would be that it could be folded down like in the first drawing for a low waisted look, or unfolded like number 4 for a high waisted look. This is something I think would be very useful and would definitely extend the life of a garment since it means it has more of a chance of outlasting trends since it can adapt to them by simply folding or

unfolding. I personally get scared by the idea of loving something now and putting lots of time, effort and resources into it but then hating it in a couple of years time, particularly because I have done this in the past. I used to only wear high waisted things when I was in year 9 and 10, but now I hate the look and barely ever do. Seeing how my mind can change so much over just a few years makes me think that I could do that all over again, so to try to save myself from growing to dislike the style, I will make it fit both. The skirt would also have pockets on the front as a design feature and for practicality. I originally drew them in drawing 1 as cargo style, but after designing the sleeves of the top I thought I could potentially do puff pockets to match (shown in drawing 2). If I decide to pursue this concept further I will experiment with both and decide what I like best then.

The top is fitted, with an open-ended zip, princess seams underbust seam and darts. It also has a ribbed mandarin collar that could match the waistband of the skirt, further tying them together. I want the pieces to definitely look like they are matching rather than two completely different pieces I just decided to wear together. The top could be worn as just this (like drawing 4), or it could have the detachable sleeves attached - see the two options for drawing 1. These would join to the shoulder seam with domes and then could also join a longer sleeve option that would add to the bottom of the shorter sleeve as another option. These three ways of wearing the top are key to the success of this design as it means I could wear it in so many more different ways to different events.

Final Brief

As outlined previously, I am going to be designing and constructing a matching skirt and top that can be worn together and apart. This design will be for myself to wear - specifically next year while living in Christchurch. This project is an opportunity for me to provide myself with these finished garments to add to my wardrobe and benefit me in that way, but also to develop myself as a designer and learn more about sustainable fashion. As outlined in my analysis of the social and physical environments, my design will need to be suitable for both of these otherwise it will not be practical, which would consequently mean I wouldn't wear it so would not meet its purpose.

Attributes:

- The aesthetic of the garments are visually appealing and suited to my personal tastes, body type, and colour palette
- ~~— The two garments can be worn together or separately~~
- Socially acceptable
- Can be dressed up or down to different situations
- Easy to take on and off

Specifications:

- Finished in time to submit for assessment (20/10/23)

- Made out of materials that are sustainable and ethical
- Fits my measurements
- Can be made with a standard sewing machine and overlocker
- Able to be washed in a standard washing machine
- **Skirt and top**
- **Has detachable options to be worn in different ways for versatility**
- **Include elements that would allow fit to be altered**

Constraints:

- Time is certainly a constraint as I have to have it done so that it can be handed in for assessment.
- Lack of sustainable and ethical materials. It is difficult to know for sure if materials are actually sustainable and ethical, sometimes even when they say they are so this can make it very hard. As a student I do not have access to the resources and supplies that industry professionals have, so I will have to make do with what I can source around me, but this is very limited.

Final Design



Final Design Feedback	
Stakeholder	Feedback
█ (Pattern Maker)	Love this! You have taken your favourite elements from your previous ideas and inspirations, worked them through and have come up with a really great design. It's a nice silhouette, has very interesting detailing and is versatile. The ties really link the top with the skirt and sleeves and having 3 options from this design is amazing. I can see that you have clearly considered a lot of the construction issues as you've worked on this and that will make your pattern making and construction a lot easier. I look forward to seeing how it turns out.
█ (Sister)	Really cool, also you always wear silver jewellery so I reckon make the domes and stuff silver so that it matches.
█ (Fashion Teacher)	This is brilliant █. The skirt really is a stunner. I like the adjustable nature of the skirt and once again how you have used the adjustable elements to enhance and add different looks. The skirt is versatile and has two quite different looks depending on the positioning of the ties and embraces a wide range of complex procedures.

This look is mostly a combination of my favourite ideas I have talked about so far. I designed this by looking back over what I had done up until this point and realising that I had some great elements but I didn't like the overall look of any of them. I also realised I hadn't further explored one of the ideas from my initial design brainstorm - the pleated skirt. I looked at it in a bit more detail and realised it could be a perfect design for this project. It has the adjustable element which I really wanted as it makes it fit to purpose, and also is exactly my style. A change to the first drawing is that I would make the cord from the adjustable yoke very long so that they all swing around at my knees, but at different lengths. I would make channels for the cord to go through and stitch this on top of the yoke, but leaving a short distance between it and the seam connecting the lower skirt so that I can fit a button for the cord to be secured into. I will stick to the original idea of having a sort of clasp at each hip to draw the waist in when worn high waisted (with the yoke not ruched).

The obvious similarity between this top and the previous concept's top is the similar sleeve design. They have the same idea of having 3 possible sleeve options - no sleeve, just a cap sleeve, or full long sleeve. The sleeve would have long ties on each of the bands connecting the puffs together, these would swing around similarly to those on the skirt, though I will need to be careful that this doesn't become a safety hazard or just become impractical. The rest of the top is different though, with gathered shaping in the bust rather than darts, buttons down the centre front (these would match with the buttons on the skirt), a collar, and an overall less fitted look. These elements have been chosen because I really love the aesthetics of them and they make the top look similar to the skirt. I want it to be very clear they are a

matching set. Overall, this look fits my brief as it is fit for my specific purpose which is to be something I would wear next year, and its versatility is perfect for this as it gives me lots of potential since it could be worn in so many different ways or with lots of other things. Having the sleeves removable will be perfect for Christchurch weather as it is so unpredictable - I could go out but then get too hot and just take the sleeves off which would be more practical than taking a whole jacket and then taking that off.

Material Research

I need to find a material that will be suitable for making this design. For the pleats in the skirt and the puff sleeves to hold their shape, the material needs to be a moderate weight, but not too heavy that it becomes uncomfortable. I also need to be mindful of the fact that I will be using a domestic sewing machine rather than industrial and this would not be able to deal with very thick fabric - this being a restriction I have. The main constraint material wise however, is the fact that I need to find something that is 100% sustainable and ethical. This is difficult to find since many sources are not completely transparent about the process that their materials go through up till the point of being sold.

Material	Average price (per m)	Pros	Cons
Cotton	\$10 to \$30	<ul style="list-style-type: none"> - Very warm - Durable - Eco friendly - Is my desired weight - Easy to wash - Lots of colour options 	<ul style="list-style-type: none"> - Sometimes cotton isn't ethically farmed
Wool	\$30 to \$100	<ul style="list-style-type: none"> - Very warm - Durable - Eco friendly 	<ul style="list-style-type: none"> - Very itchy often - Expensive - Potential animal welfare concerns - Would not hold its shape - Needs to be hand washed - Often sold as a blend with polyester which isn't sustainable
Silk	\$20 to \$100	<ul style="list-style-type: none"> - Regulates temperature 	<ul style="list-style-type: none"> - Expensive - Requires

		<ul style="list-style-type: none"> - Lightweight - Natural shine and drape 	special care as its so delicate <ul style="list-style-type: none"> - May not be vegan friendly
Linen	\$20 to \$60	<ul style="list-style-type: none"> - Breathable and cool - Absorbs moisture - Environmentally friendly production - Biodegradable - Lots of colour options 	<ul style="list-style-type: none"> - Wrinkles easily
Recycled Materials	\$0 to <\$20	<ul style="list-style-type: none"> - Reduces waste and resource consumption - Supports circular economy - Creative and unique design opportunities 	<ul style="list-style-type: none"> - Quality may vary depending on source - Availability of certain types can be limited

I was researching lots of different materials I could potentially make my look from and then made this table so that I could easily compare my findings. Looking over it now, I can see that cotton or linen are my best options, with potentially aspects of recycled materials. Cotton would be great as it is easy to find and comes in a variety of colours and weights so I could be very fussy and find something that is exactly what I want without compromising the aesthetic of the look. The difficult thing with cotton though is that it can be very hard to find cotton fabric that has information about where and how the cotton was harvested, and then all the other treatments it goes through before it is sold in shops. Cotton has a history of being unethical and not sustainable due to the harsh chemicals that it is treated with that harms the environment and uses lots of water, and the poor treatment of workers along the way.

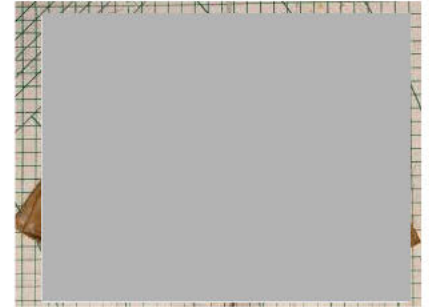
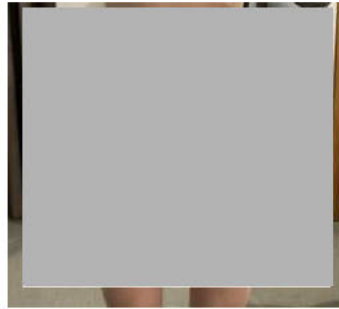
Linen is much more environmentally friendly, typically. It is made from flax plant which means that it is biodegradable and doesn't release microfibres, similarly to cotton which is also a plant so doesn't release microfibres. Linen has a much better reputation, however, of being made with ethical practices and in general uses less resources. Linen typically requires significantly less water for cultivation compared to cotton. Cotton is known to be a thirsty crop which can significantly damage communities, but flax can often be grown with rainwater, reducing the strain on water resources. Linen also gets treated to far less pesticides and synthetic fertilisers, which can have detrimental effects on the environment and human health when used excessively. Linen is known for its durability and strength. Garments made with linen tend to last longer than cotton, meaning they need to be replaced less frequently.

This reduces the overall environmental impact of linen products as they have a longer lifetime before they reach landfill.

I will look into my options over the next short while but specifically linen as I think this would be the best suited material for what I am wanting. Both cotton and linen can be found in similar weights so I will consider this as I start pattern making and planning how I will construct the garment.

Pattern Making: Skirt

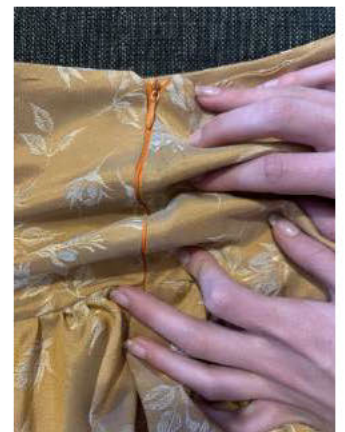
I am going to start with the pattern for the skirt. Working from a skirt I made a couple of years ago, I traced a pattern of the yoke as it is a similar shape to how I would like mine. The original skirt pattern was made by draping on



myself so it fits nearly perfectly, therefore I took that pattern from this to save myself time. I'm doing everything I can to save time since I need to be allowing plenty of time in future for things to go wrong and me to be able to fix them as I want my final product to be as good as I possibly can. From there I calculated how much I needed to add to the waist for it to also fit around my hips when gathered, altered a couple of the angles of the seams I didn't like, and decided where to put the channels for the tape to go through. I made the pattern for the channels and the tape based on the widths I wanted by measuring this out on pattern card and then adding seam allowances.

First Issue: How to construct an opening

The first real complication I came across very early on as I realised that I had not factored in any way to get in and out of my garment when designing it. I had basically assumed I would be able to put an invisible zip into the side seam since I am confident using them and love the look. This will not work in this particular skirt though, however, since the side seam will sometimes be worn gathered. The extra bulk of the zip wouldn't allow the material to gather evenly and therefore would greatly damage the overall look of the garment. Due to the shape of the skirt, whatever part opens to let me get it on and off, must open from the waist of the yoke all the way to half way down the lower skirt panel. The side seam on the lower skirt panel will sit flat at all times, and since I want to only have one type of opening, whatever I decide on must be effective and look nice when both gathered and flat. The first things I considered were other types of zips - I thought maybe there would be some kind of very lightweight zip that was flexible enough to sit nicely even when gathered. A bit of research and trialling with as many different zips as I could find, proved this wrong. None of them were even close to flat enough, so I ruled out this option.



My next thought was to do buttonholes and buttons all down the side, but I thought these would be too heavy. Also, for buttons they would need to be very close together to avoid them gaping open - especially when gathered. To be close together enough they must be very small and there would be lots of them, if each button was 7mm, with a 3mm gap, I would need to have about 18 of them which is a lot. This would take a very long time to do up or undo. This isn't a massive problem as we are still talking less than a minute, but I know that when it comes to it, I would end up choosing a different option instead of this one if I wanted to wear a mini skirt. I need the skirt to be very functional and easy to wear otherwise it is just not worth my time, effort and resources. From this conclusion, I ruled out buttons unless I really can't find another option.

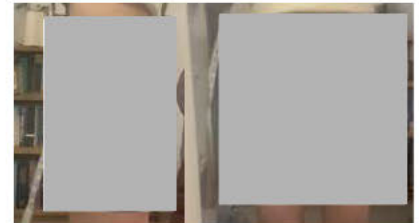
The next idea was far more complicated, but had the most potential so far. This idea was formed once I started thinking about *where* the join would be. I had started by just thinking of the left side seam as is standard for womens clothing, but then I considered other options such as centre back, or even along one of the channels for the tape. This was a good idea, I thought, as it would gather well since it is right next to the source of the gathers. I worried that if the join was on the side seam it would be too far from the source of the gathers so therefore more likely to not gather properly and not sit nicely. I brainstormed a few ways I could work with the tape itself in the channel to join the fabrics together by laying them on top of each other and having the tape weave in and out of eyelets in both layers - securing them together. The tape could just be pulled out when putting the skirt on or taking it off, allowing the two pieces to separate. This would only work for the yoke section of the skirt though because the lower skirt wouldn't have channels in it. I could use the button option on the lower side of the skirt. Both the top part (with the tape woven through the layers) and the bottom (with the buttons) would take a while to take on and off though, so I would have the same issue as with the whole thing being buttons, I just am not likely to bother wearing it much.

I then just thought about all the clothes I have and all the different ways they do up, and remembered a corset top I have. This top does up at the back with hook and eyes. This had hook and eye tape, but I know you can attach them individually which would be a better option for me since the tape would put extra unnecessary weight in the fabric meaning it wouldn't gather evenly like the other side.. This could be a really good way of closing the side seam as there won't be anything (such as a heavy zip or tape) to mess up the evenness of the gathering due to their bulk, and also is easy to do up and undo. Similarly to buttons, I would need to have them very close to each other so there is no gaping, but this will be fine as they are quick to do up and undo, so it doesn't matter if there are lots.

Next Steps: Continuing the first pattern

Now that I am confident that I have a good way to do up my skirt, I can factor this into pattern making by adding a small facing to the left side seam for the fastenings to be attached to. Knowing that I will be able to do this later though - I didn't include this in the pattern for my first mock up because this is more for the purpose of determining the correct overall fit rather than the specifics of detailed construction.

I started with the upper skirt pieces, I made sure the shape of the pattern fit together correctly, and then cut it out of an old sheet. I chose this over calico or any other fabric because this is far more sustainable. I am making use of something that was already about to be discarded, so this was making the most of what was left. The reason the sheet was going to be discarded was because it was very worn in many places and it had holes in it. I am able to cut around the holes though, so this doesn't affect me.



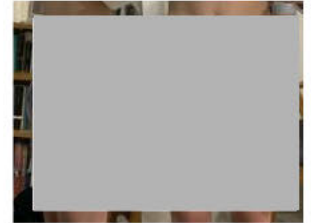
Once I pressed the fabric to ensure it would sit flat, I cut my pattern out in the fabric and sewed it together. I tried it on and made notes of the things I needed to change, these being minor adjustments to the general shape such as lowering the CF and CB, and taking in the waist. Once those changes were made and also marked on the pattern, I tried it on again - this time for the purpose of drawing on where I wanted the channels to be. I decided to do it this way since then I could tell exactly where they would sit on my body, this would have been hard to do just on a flat pattern. Also, if I

just attached the channels without trying it on and checking their positions, I could risk them being wrong and then having to change it which would be a waste of my time - something I am trying to conserve. Once I had these positions right, I cut and attached one channel so I could see what the topstitching looked like. I also made one strip of tape so I could check how functional the channels would be. I very quickly realised however, that I wouldn't be able to tell with just one set (channel and tape), so I made the other five.



Next I measured the lengths for the lower section of the skirt. These measurements were for the CB, CF, and side seams. These were all only a centimetre off each other though, so I decided I would try my best to make it work with it the same all the way around. It wasn't just for the sake of making it easier for myself as I know I would have been 100% fine with slight curves, but the problem with curves is that it means there is wasted fabric. With the lower skirt just being a rectangle it can be cut from a corner of the fabric with only the selvage as waste. I made that pattern by measuring the width of the bottom edge of the upper skirt pieces so I had a finished length for the top of the lower skirt as they needed to match. I decided on a pleat width to try, and then calculated the rest of the pattern from there. I actually only cut a few pleats out though since I didn't need to to check the length and shape.

Once this was attached to the upper skirt, I did a second fitting. This involved a few more changes that I marked on the pattern and then altered on the mock up. Right from the start I made sure that if I wasn't certain on a measurement I made it bigger. This worked perfectly as planned, because it has meant I have been able to do all my fittings and adjustments with the same piece of fabric rather than cutting and sewing lots of different ones which would take more time and resources. I made these changes and tried it on for a final time as it fit perfectly. Here is my updated pattern for the skirt.



Pencil line: original

Red Pen: changes from first fitting

Green Pen: changes from second fitting



I then traced the green lines onto the card so that I could make 100% sure everything is accurate and fitting together, and that the top edges were right angles. Once that was sorted, I was onto the most complicated job yet, to figure out how to shape the pattern for the join at the side seam.

The side with the join must:

- Have a seam for the eyes to be inserted into 5mm from the side seam
- Have a 2cm panel from the back to sit underneath the front piece
- Have hook and eye joins until 4cm down the pleats
- The lower half of the pleats must join at the underneath fold so the seam cannot be seen

After plenty of sitting and thinking, and folding my pieces to try to visualise different solutions, I found one that I think will work. The lining back piece of the yoke will have an extra 4cm on it, this is so that it extends 2cm out and folds to join to the outer back yoke creating the 2cm panel which will act as a sort of guard under the hook and eyes, and also minimises chances of the gap showing any skin through it. The front yoke piece will have no extra pieces, it will just be bagged out and then topstitched

on the edge. The hooks will be attached to this side as this is standard for hook and eyes - the hook goes towards the back. The hooks will be hand sewn to the underside of the front yoke's left side. For the lower skirt section I have shaped the pattern with the goal of having the seam joining the lower half hidden. To do this, I've put it at the back fold of one of the pleats therefore pretty much completely hiding it. I have marked on the pattern how far to stitch up for both sides of the pleats, and from there I shaped the piece diagonally to exactly line up with the top edges of their respective sides.

Fabric:

has shown me through her selection of fabric at school and has offered me some linen to use. It is a beautiful neutral colour. I am really happy with this as it is a perfect weight, good neutral colour that will go with my skin tone and most of my other clothes, and I don't have to pay for it. This means I will be more inclined to spend more on other things such as the domes if needed which is nice. I don't have a set budget so this doesn't make too much difference, but it is still nice not to spend more than I need to as I am a student so am not earning much from my part time job.

Cutting:

I decided to cut and make up the majority of the skirt without making the ties yet because I will make lots of these at once once I decide how long I want them and I won't be able to visualise this properly until I can try it on. I made the decision to cut the lower skirt panel on the wrong grain than normal. I made this decision because otherwise I would need to put another join in the fabric which I want to avoid. There is no pressure on any of the material in this pleated section and it is hard to tell the difference in grain just by looking at it so I believe this will not make a difference.

This is the layout I will cut out my pattern in. Some pieces are just roughly drawn in as they are repeated and I didn't want to waste time and materials by physically making them when it is very easy to just use the same pieces again.



Pattern Pieces

- Upper Skirt x2
- Lower Skirt
- Lower Skirt Lining
- Lower Skirt Guard
- Tape Channel x10
- Tape x10 (*This includes four for front channels, 2 for back channels, and four for each of the side ties at waist*)
- Tape Channel x6

Other

- 6 Buttons
- 16 hook and eyes
- 1 Label
-

Construction Method:

I spent a long time figuring out this construction method, as I wanted my construction to reflect the fact that it is a high quality garment, and I also need to consider the fabric I am working with.

Here are the steps in the best order to construct this garment: (note I did swap a couple of the steps around as I had to alter fitting at some points or change my method from what I had first thought)

1. Cut out the fabric using the pattern and layout shown above.
2. Press the sides and end of all 6 **channels** inwards on the wrong side of the fabric.



3. Overlock wearer's right side of the **Upper Front** and **Upper Back**, outer and lining.
4. Join the side seam of the **Upper Front** and **Upper Back** on both the outer and the **lining** pieces then press open.



5. Draw lines on the **Upper Front** and **Upper Back** in a heat removable pen where channels sit.
6. Stitch the **channels** into place on these lines.



7. Attach my personal label to the **Upper Back Lining**
8. Draw on wearers left side of **Upper Back** where the eyes will be attached.
9. Hand sew down into place securely.
- 10.



11. Place **Upper Back Lining** on top of **Upper Back**, covering the eyes, right sides together.
12. Sew into place, hand winding foot to ensure the needle doesn't hit the metal eyes and break.
13. Press seam open, pointing eyes towards the lining.
14. Press **Upper Back lining** fold according to pattern - 2cm from the seam.
(Photo above on the right)



15. Measure and hand sew hooks into place on the **Upper Front**.

16. Press **Upper Front Lining** left edge 1cm in then hand sew under hooks, closing the top and side edges.



17. Sew sides and one end of each of the 6 **Tapes**.
18. Turn through and insert into the **channels** on the **Upper Front** and **Upper Back**. Stitch in place.
19. Putting right sides together, sew the **linings** to the **outer pieces** along the top edge.



20. Understitch 2mm along the top edge of the lining, leaving 3cm at each end.

21. Hand sew the 3cm openings at each end being careful of the hook and eyes.

22. Overlock sides of **Lower Skirt Guard** and the **Lower Skirt**.
23. Hand sew eyes to right edge of **Lower Skirt Guard**.
24. Putting right sides together, join the **Lower Skirt Guard** to the **Lower Skirt**.
25. Join the other end of the **Lower Skirt** to the Lower Skirt Guard, making the lower skirt a complete loop.
26. Overlock lower edge of the **Lower Skirt** and **Lower Skirt Guard**.



27. Press up hem.
28. Stitch hem and mark pleats.
29. Press pleats.
30. Edge stitch pleats.

31. Hand sew hooks onto the right edge of the **Lower Skirt**, being careful to only sew through one layer of fabric.
32. Join **Lower Skirt** to **Upper Skirt** placing right sides together, being mindful to line up the ends perfectly.
33. Hand sew lower edge of **Upper Skirt Lining** closed, encasing the seam.



34. Attach Tape to each of the marked boxes on the upper right corners, making sure ties are facing outwards. Sew a box and then a cross shape to ensure they are strongly secured.
35. Measure the four front ties, and two back ties to where they meet the end of the tape channel when ruched. Mark this place.
36. Sew Buttonholes vertically on the tape at these marked points.
37. Sew buttons to the points just under the **Tape Channels** on **Upper Skirt** and **Upper Skirt Back**. (I haven't attached the buttons just yet as I haven't decided what ones I am using this, I will decide this once I have made most of the top as it will depend on some factors from that such as what colour dyes I can find and the total number of buttons I need. It would be no good to source my 6 buttons for the skirt now and then realise I don't have any more for the top that are the same, and I want them to be matching. I also can't do the buttonholes yet as the size of these will depend on the buttons.)

More details on specific decisions along the construction process:

Issues with pleats:


I knew that working with a natural fibre such as linen would be slightly more difficult as it wouldn't maintain a permanent press, but this is causing more complications than I thought. I have realised that when pressing the pleats, they haven't been staying nicely pressed for very long at all. Since the construction process is taking a long time, there has been a significant gap between when I first pressed my pleats and when I am now going to stitch the hem. The reason I hadn't stitched the hem first was that I did think that I might potentially run into an issue like this and having stitched the hem first could make it more difficult if I needed to fix it in any way. Now I have gone back to work on the pleats/hem, I have realised that I already need to press them again. This is ok for now as it is easy to press them during this process, but this got me thinking about its practicality in future. For it to be fit for purpose, this outfit needs to be easy to wear, hence need minimal maintenance. If I am needing to constantly re-press pleats then this may be a barrier that stops me wearing it, and I don't like the look of it unpressed so would likely just not wear it. This would waste my time and materials making it and is definitely not what I want. Therefore, I need to

find a solution so that my outfit won't need to constantly be pressed. The best way to do this would be to do lots of topstitching over the garment to hold seams open, and in the case of the pleats, this means edge stitching them individually.

When edge stitching pleats, there are two ways I know to go about it. These ways differ in the way that one of them involves stitching the hem first and then edgestitching, and the other involves edgestitching and then sewing the hem. The first is the option I thought of first, as I got the idea from my school skirt which was constructed like that, though I feel like the second could potentially look better. To decide which option would be better for me, I needed to be able to properly assess how it would look and work by trialling it. I used the small strip of a few pleats that I made in my first mockup to do the trialling because I didn't want to waste more fabric.

Looking at this, I was right, the second option (on the right) does look much nicer. There would be issues with the first one such as which way to have the edge fold at the end and the bottom of the pleat not sitting neatly as it would have a small indent disrupting the straight line of the pleat. I was pretty confident with my decision but decided to consult one of my stakeholders to get her feedback and also to check there was no completely different way of doing the pleats that I hadn't thought of.



Pleat Edgestitching Feedback	
Stakeholder	Feedback
 (Pattern Maker)	Yes I agree with you that the edge stitching looks nicer when done after the hem. The reason the school skirt was done differently was since - though this is also true for most skirts - the hem is sewn last and also the hem is designed to be taken up if needed. If the pleats had been edgestitched after the hem was done then this would be far more difficult to be altered. For your case though, so long as you make sure the hem is correct first, then definitely I would recommend you edge stitch after the hem for a clean finish.

Conclusion due to feedback:

This was very valuable feedback, I will definitely go with that option then: I will edge stitch the pleats after finishing the hem.

Hook and eye closures:

My first thought for hook and eyes was to look at a second hand shop to see if I could source these there, but had no luck. I am under time pressure and need to make sure I don't fall behind, so I am considering buying a packet of them so I could keep

moving forward with my project. I am unsure of how sustainable and ethical these will be to buy though, so I decided to contact the brand I was most likely to use:

[REDACTED]

Sadly, I received no response from them. This was not entirely unexpected as they are a large company, but I will still try to follow up on their sustainability and ethics in future for other projects I may pursue after this. I ended up buying one set of [REDACTED] hook and eyes and got started. I hadn't figured out exactly how many I would need as I knew I would want to be able to visually see their spacing to figure out an exact number. I knew if I needed to buy more, I easily could. Once I had figured out the number I needed though, I realised I was only 2 sets short. I didn't want to buy another set, as they come in packs of 14, so this seemed excessive. I asked my mum if she had any, and then I looked through her small collection. I found a few, but none identical to those I had already used. I found a few eyes that worked, but the hooks were all too big to fit through them. I knew she barely used them and that they would probably not get used if I didn't use them, so I decided to make them work. Using pliers, I squeezed the tips of the hooks, making them narrower so they would fit through the eyes. This worked perfectly, and I could then sew them right onto the garment.

Buttons:

I looked hard for the right buttons to use at this point, but unable to find any, I decided to leave this unsolved for now.

Figuring out the length of the tape: (photo)

I wanted to make sure I liked the lengths of the 6 vertical tape before cutting them, so I used the scrap strips of selvage to visualise it. Once I had the lengths I wanted, I wrote these down in my notebook and then cut and made the tape in the correct fabric.

All notes taken while making the skirt:

Home Our Range Specials Resources Contact

Company Name ABN / NZBN *

First Name * Last Name

Contact Number * Email *

Trade Address

Message

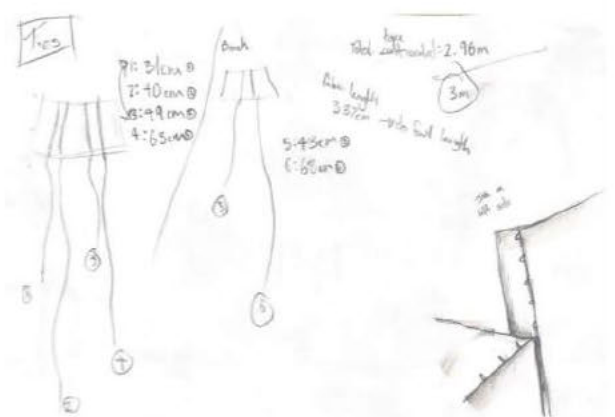
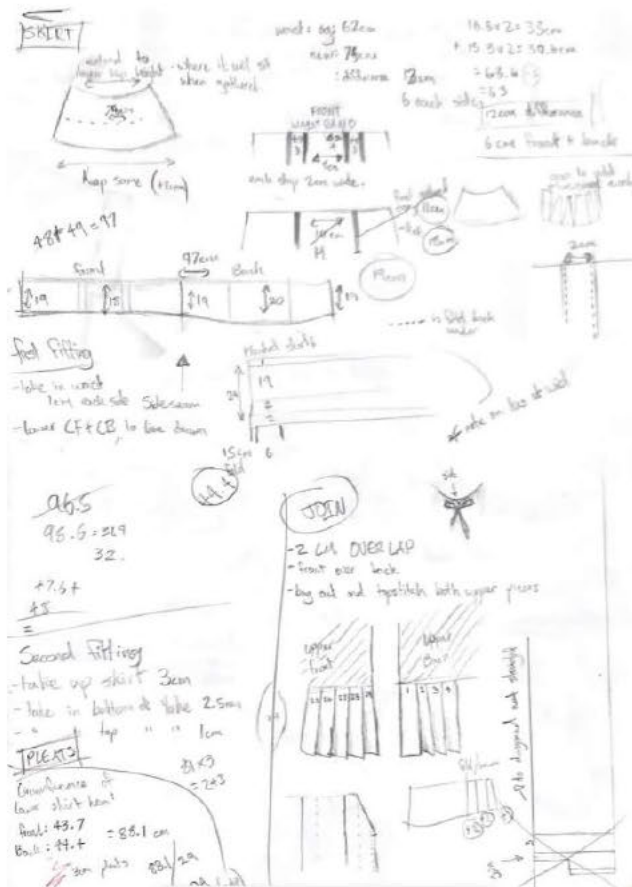
Hi [REDACTED]

I am a student from New Zealand in my final year of High School. For my NCEA Fashion class I am working on a project which involves being as sustainable and ethical as possible. I am considering using your Silver Metal Hook and Eyes, as well as your Ring Top Snap Fasteners.

I would love to know how sustainable your products are, including the packaging. It would be greatly appreciated if you would please share any information that I could share in my assessment.

You have 0 characters remaining.

Send Clear



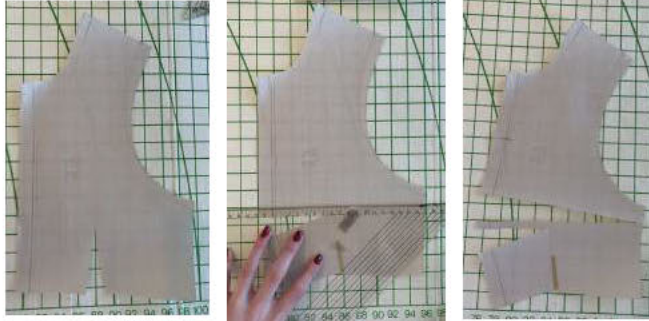
Pattern Making: Top

The top had a similar pattern making process to the skirt. I looked through some patterns I had as I assumed I would have some kind of fitted bodice shape to start from, but realised I didn't. My next choice was to take the pattern off of a top I already had. I picked this over buying a pattern because I am less likely to need to fiddle with the fit of it as I know it already fits me pretty well. Having a lean column body type means that often standard clothes do not fit me exactly as they aren't long enough or don't fit me tight enough at the waist and I think I would come across this issue when buying a pattern. Having to make lots of alterations to the pattern would almost ruin the purpose of buying the pattern in the first place, so I decided to save the time and money. I also am likely to learn more by practising making the pattern myself and this was an opportunity I was happy to take.

The top I started with was a tight fitting waistcoat. I picked this to start from as it has a good armhole shape and fits the rest of my body well. Seeing as it is a waistcoat though, there will obviously need to be some major changes such as the CF join and the hem - as well as adding the seam details and gathering from my design.

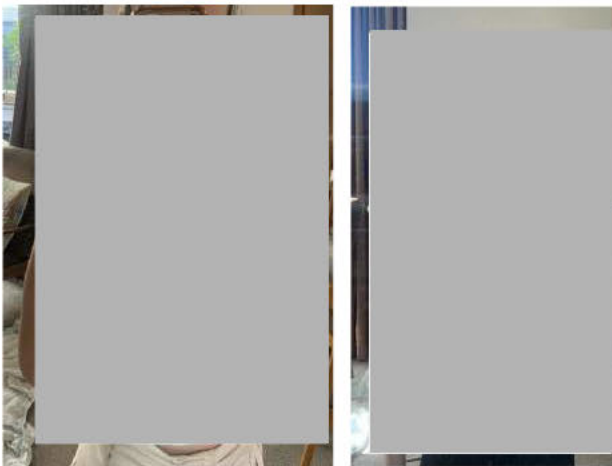


To save time and potentially save fabric by doing multiple mock ups, I tried to get as many measurements and information as possible from this top. I tried it on with the skirt so that I could ensure they fit together accurately compared to my final design. This included lots of note taking, drawing and pinning the garment.



I spent a while trying to find the best way to make the pattern for the upper front piece (the part with the gathers). I ended up making the pattern fit me normally, with the bust shaping in a vertical dart. I then manipulated this dart, moving it to the centre seam. This didn't look wide enough, however,

so I opened a larger wedge.



After making the pattern I made a mockup in the leftover parts of the same sheet I used for the skirt mockup. Once again, the reason for this was sustainability. I made sure I liked the shoulder shape before drawing on the width of the armhole binding. This will be where the domes are attached. I will make the pattern for this by tracing the front and back shape off this mock up, and cutting x2

so that the binding is two layers thick. This is so that the material is stable enough to hold the weight and pressure that will be put on it.



There were still a fair few changes I needed to make, such as altering the shape of the side seam (I unpicked it in the photo so that I could see where it naturally fell), but I felt confident enough not to do another mock up.

Sleeves (For this section I have skipped over some of the basic construction in between steps)



Next I made the pattern for the sleeve, starting with the upper section. For this I drew a standard sleeve shape and then added lines where I wanted volume added for the gathers. A quick mock up in the sheet proved it successful.

After plenty of measuring of my arm length, and some calculations, I made a pattern for the lower arm section. I only made up the top half of it as I didn't feel the need to trial more than that. I would be able to get the fit of the length easily with measuring, and I only needed to practise the gathering once.

I realised one issue that I needed to address - with the lower part of the arm being attached over the upper part, when looking down at it you can see through the gaps. The other issue with this is that since I will be attaching tape over this join, it would have to be attached to the lower section. This would mean that if I was just wearing the upper arm section, there would be no ties. I really want there to be ties on the upper section as I like it as a design feature and coordinates with the ties on the skirt. I'm aware that the domes will make the top look like a slightly different style and so I want to keep the ties on the top to make them more cohesive. My solution to both these issues I have just mentioned is to have the lower sleeve attached **under** the upper section. Therefore any visible gaps will be on the underside so not visible, and then I can have the ties attached to the lower band of the upper sleeve, meaning it is visible with and without the lower sleeve attached.



Cutting Lower Sleeve

I lay out my fabric and realised it was only slightly longer than the measurements I had for the lower sleeve, so I substituted this total measurement into the equation I had developed (this is shown in the scans of my notebook at the end of this section). It was a small difference so I decided to cut my pattern to this length to minimise waste. This was a simple way I was able to use clever pattern cutting to keep my garment as sustainable and ethical as I can.

Side Seams

When doing a final fitting before sewing down the side seams, I realised that the fit was slightly too wide on me. This isn't a serious issue as it is very easily fixed at this stage, but I saw some potential here for future versatility. Instead of cutting the fabric smaller when I took in the sides, I left it wider so that if my size changes then I could

simply unpick and then resew the side seam with a smaller seam allowance. The fact that linen won't permanently be altered by pressing means that if I did this, there wouldn't be large visible creases as there might be if this was done in another material such as a polyester/polyester blend. This also gives the top a better chance at a second life if I ever decided to pass it on to someone else. If it fits a wider range of people, it is much more likely to be worn. This addition to my garment makes it even more



fit to purpose because of the fact that it increases its sustainability as it has a greater chance of having a longer life cycle. This was the second point of Joshua Howgego's article on a circular economy, mentioned previously. Using products for short amounts of time tends to mean people are over consuming, so I am glad this garment can be used for a long time, in an attempt to combat this.

Hand Sewing

Compared to the skirt, the top has significantly more hand sewing, meaning it is taking much longer to make. This hand sewing wasn't my intention – I was aware of the time it would take – but has ended up being a big part of it for the purpose of aesthetics. A massive contributor to the success of this project is whether I actually love the look of it and if it fits my personal style. Some parts of the garment I had to topstitch such as the placket and hem, but overall I am trying to keep the topstitching to a minimal as I like the more simple look without it. Prioritising this over keeping time down meant I was able to hand sew closed all around the armholes, the bands that attach the different parts of the sleeves to each other, and the inside of the collar which encased the seam neatly. I am really happy with the way these turned out and am pleased with this decision as I do believe it will mean I am more likely to wear it.



Domes

I placed pins along the bands where I will be putting the domes so I could visualise the distances apart I wanted. This also meant I could calculate the number I would need to buy. This number worked out to 50 domes total, and since the domes came in packets of 8, this means I will have 6 left over. I have two choices here: the first is that I could space out the domes and get one less packet (so a total of 48 domes), or I could use the extra six domes down the front of the shirt where I had originally intended to have buttons and buttonholes. As I don't know how I am going to find buttons yet, I will go with the dome option for the front.

Elastic & Elastic Casing

On each of the lower sleeves are 3 places where I will have channels with elastic. These channels will be on the inside of the garment to avoid unnecessary topstitching. Each channel has been neatly sewn so that elastic can be inserted without unpicking anything, also meaning that in future, myself or others could change the length of the elastic very easily. The channels end slightly before the underarm seam.

Finding the elastic to go into these channels has proven complicated. Standard elastic is usually rubber or spandex, encased in polyester - all of these materials not being sustainable. Because of this, I didn't want to buy it new so I am going to try to find some second hand.

I asked around, and one of my family members had some spare elastic that they had had for quite some time and hadn't used. They were happy to give it to me. It had lots of wrinkles and folded parts, showing its age. This didn't bother me, but did make me aware of the fact that I didn't know how good quality it was so it could potentially break. This adds another benefit to the open ended channels as it means that if the elastic were to potentially break in future, then it could be removed and replaced very easily.



Buttons

(Photo is on both garments simply to see more of the fabric, I have decided now that buttons are only for the skirt)

One of my final issues was finding buttons, though this was made simpler once I had decided to put domes along the front of the top as it meant I needed about half the number. My mum has quite a few buttons so I had a look through them to see if I liked any. She collects them off clothes when throwing them out, so they are all second hand which would be a great sustainable option. There were a few options here but I wasn't sure on any, so consulted my stakeholders for advice.

Button Feedback	
Stakeholder	Feedback
██████ (Pattern Maker)	The size of those buttons look good, but the colour of them definitely does make a big impact on the overall look of your piece. For example, the brown ones when paired with the natural linen gives a safari look.
██████ (Sister)	I agree with the previous thing about the brown looking safari, and also the marbled ones look like Kmart which makes it look cheap so I would avoid them.
██████ (Teacher)	(I spoke to her in person so have written this myself) She suggested I look through her collection of buttons to see if there were any I liked. She had lots of grey so thought I should use these.

I am very glad I consulted my stakeholders here as I gained some valuable insight to things I hadn't thought of myself. ██████ and ██████'s comments especially have really helped to narrow down my decision; these were both things that I want to avoid. I'm still not decided though because I don't like the look of grey on the natural linen. I decided to ask my Grandma if I could look at her buttons as I know she has a lot of second hand ones, similar to mum's.

Button Feedback #2	
Person	Feedback

Grandma	You could use metal to match the domes, that could also be more sustainable than plastic and would last longer. I also have some unused covered buttons if you want them.
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This made me realise that matching the domes should actually be a big part of this decision making process as they will be seen very close to each other. Also, some of the buttons go on the skirt so will need to match the hook and eyes too. These are the same colour (silver) as the domes though, so shouldn't be too difficult. I chose these to all be silver because of [REDACTED]'s feedback on my final concept - she is correct that I always wear only silver jewellery so I want this to match. I looked into some metal ones but realised quickly that for the size I want, metal likely won't be strong enough.

Covered buttons could be great though as then I could use up some of my scraps, while also meaning the buttons don't take away from the look of the garment. That has been my issue, all of the buttons I have found have been too bold and became features of their own, when I really do want them to be insignificant and blend in. The skirt is already detailed enough



that I don't need more. Grandma gave me a set with 2 in it (the ones on the red label), and Mum found some others that weren't with her previous ones I had looked at, so she got them out for me to use. Mum had one pair that were exactly the same size as Grandma's (on the black label), so I decided to use those 4 on the front. She had another set that was slightly larger (gold label), so I decided to use two of them for the back as I don't think it will make too much of a difference and I would prefer to keep my

garment as sustainable as possible by using these rather than buying new. As also mentioned before, I will use scraps to cover them. The photo to the left is of me tracing the circle onto one of my scraps so I could cover the button with it.

Final Prototype

Once I had finished all the construction, my final prototype was complete. I tested all aspects of it to confirm that everything worked and looked how it should. This included the domes, buttons and hook and eyes. I also did a final fitting to make sure I was happy with how it all looked on my body.

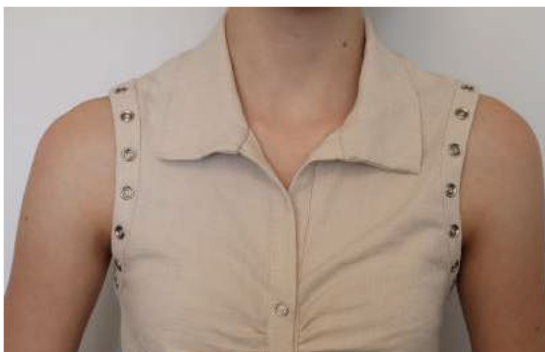
SKIRT + TOP + FULL SLEEVES



SKIRT + TOP + UPPER SLEEVES



SKIRT + TOP



SKIRT (BOTH RUCHED AND NOT)



ADAPTATION: CUFFS




Final Prototype tested in the intended social and physical environment



To test my garments I wore them in a variety of different ways, paired with pieces from my own wardrobe. This was very easy to style and was very inspiring. I already loved the pieces, obviously, but this made me love them even more as I saw the extent that I could be creative with these unique, versatile pieces. Some of these pictures above are from times I wore the outfit out, and some were just times I styled the pieces for the sake of testing how well they would fit my look. I believe all these looks are appropriate socially, and also show different ways they can be worn in different physical environments such as over a bikini in summer at the beach, or under a big coat and hat with tights in winter months.

One thing I have noticed since wearing the skirt for a while, however, is that the pleated section at the back gets very wrinkled when I am sitting, so when I stand up I have to make sure I smooth it down - and even then there are visible wrinkles. There is nothing I can do to change this construction-wise, this is just because of the fabric. I am aware that this would be much worse if I had not edge stitched the pleats so I am very glad I did that.

Final Prototype Feedback

Stakeholder	Feedback
 (Pattern Maker)	<p>What a fantastic result! Your final pieces look so similar to your initial drawings and achieve what you set out in your brief.</p> <p>There is some complex pattern making in both pieces. Working out all the pleats must have been a challenge and manipulating the front shaping into gathers at the CF has been done very well. Both garments fit well in all the variations of ways you can wear them. This was vital to make your concept of variations effective - well done.</p> <p>If you ever decided that you wanted to change this outfit up again, as you have chosen a natural fibre it can be easily dyed.</p>

	Great that you have many seams in your design and most of the pattern pieces are small. This means you can arrange the pieces close together more easily. This can reduce fabric waste.
█ (Sister)	<p>This look is very you, the combination of the short skirt, bubbly sleeves and arm tassels are very much your style. One thing that you could change might be to make the arm tassels shorter, I feel like they could get annoying after a while or be like a safety hazard.</p> <p>I like the outfit best when it is worn with the half sleeve only, this looks interesting without being too much. Not that the lower sleeves are too much, but I just like the simplicity of the look more when it is just the half sleeve.</p> <p>The skirt is the best part, I love, love, love this.</p>
█ (Teacher)	<p>█, what an outstanding prototype that becomes a whole range of garment options as was your goal in your initial brief. The standard of workmanship is high excellence and the complexity of your pattern drafting is outstanding. I admire the high standard that you have set for yourself, with the finest attention to detail at every stage of the technological process in designing and making this prototype. This is fantastic for your context for 2024 in your social and physical environment as it is extremely versatile and creates a range of options for a wide range of contexts that you will be in as the year progresses. The linen is sustainable and ethical.</p>

Wider stakeholder feedback

Final Prototype Feedback	
Stakeholder	Feedback
<p>█ (Exhibition Designer from the █)</p>	<p>I really love the overall look of it, and like the versatility. It is great that it is so versatile yet still looks cool with the domes - the fact that it doesn't look versatile but it is. This is an aspect that will mean that you will wear it. The impeccable quality of your construction also means that you will wear it. Both garments are made very well so it will last well and can be washed frequently and still be nice.</p> <p>The neutral colour can be worn with anything - the two garments don't need to be worn together, they could be worn with lots of stuff. Also, the different types of fastenings you have chosen are all fit for purpose in the different areas of the garments. The hook and eye closures are very clever, might be quite slow to put on and take off though!</p>

	<p>The collar of the top elevates it in the way that it allows it to be worn in an even larger variety of places than you have mentioned when testing in your physical environment. Next year, as you will be studying, you are likely also going to be applying for part time work. The collar means that the top would be appropriate for a job interview if worn with the right combination of other clothes.</p> <p>Now that you have a physical cardboard pattern you could make it again if you decide you would like to, this saves time remaking the pattern. I can see that it fits you well so this could be a great thing to do. Another top like that in black could come in very handy.</p> <p>One issue I can think of is that I am guessing you will have a fair bit of scrap fabric which isn't super sustainable, though at least it is a natural material. Google some ways to use up scraps - I know there are lots of projects online for that. Love that if you gave it away, the top especially could fit a variety of audiences. Wish I was that size so I could wear it!</p>
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Hearing back from my stakeholders, and especially [REDACTED] gives me a lot of information I could use to inform further improvements to the design. The overall concept was highly praised, with general support of the exception of the versatile features and sustainability. I love what [REDACTED] I said about dying the linen as this is a great option, this could tie into [REDACTED]'s comment about having it be very useful in black. If I ever didn't want the natural colour I could dye it black and get more use out of it. Sam's other note on scrap fabric being an issue is one I had been concerned about myself, though I have a plan for these in future. I have been collecting fabric from over the last few months of sewing my own other projects. These linen scraps have been added to this collection - once I have more then I will use these I intend to make a puffer vest and fill it with them.



Final Evaluation of prototype against the brief

Conceptual Statement:

I have developed a design that solves my issue. I now have two very versatile garments that are sustainably and ethically made, and will be very useful for me next year as I head into tertiary study in Christchurch. These garments are a skirt and a top. They both have multiple elements included in their design and construction that allow them to be worn in multiple different ways for maximum versatility. They also can also be pretty easily altered to fit slightly different sizes, this extends its sustainability as I could continue wearing them if my size changes, or a larger variety of people could then wear them if I ever gave them away.

During this process over the course of this year I have learnt more than I ever thought I would for one class. I have grown as a designer, learning new ways to

develop my ideas and pushing myself to think deeper into my intentions and purposes. I will be able to develop these skills further next year during studies towards a fashion design degree. My design is acceptable socially, and also appropriate for my physical environments next year. The garments are based on relatively standard types of garments that are seen every day in society, as my inspiration and research were both mostly around already existing garments that *are* out in society. Having tried the garments in their physical environments, I can say that they are appropriate for many different physical environments as they can be worn with so many other different things giving them almost limitless potential.

Specifications:

I have met all the specifications outlined in my brief. My skirt and top were made very sustainably with a standard overlocker and sewing machine only. They both fit my measurements accurately due to the amount of time put into and the precision of my pattern making. The sleeves detach in two different places and the skirt has two different ways of being worn giving both garments lots of versatility. They are able to be washed in a standard washing machine meaning they are practical to wear. They were also fully completed before my due date for marking by my teacher. The side seams of the top allow the fit to be altered if necessary in future, as well as the ties on the side of the skirt.

Attributes:

Throughout the design process and within the design I have considered all of the attributes outlined in the brief. I have created a design that is visually appealing and is suited to any personal style. I love the outcome and can see that I will get lots of use out of it next year. It suits my body type and is a colour that compliments my skin tone. These were not requirements as they are both subjective and I prefer to prioritise other things that make me happy when designing, but it is a nice bonus that these things happen to also match these.

My design can be dressed up and down for different situations, a hoodie could be worn over the skirt for a more casual look - ranging to more formal attire such as heels and dress pants with the top for a business look. This makes my garments very wearable and maximises the use I will get out of them. The garments are also very easy to take on and off. The darts are very fast to do, though this must be done with the garments off. The hook and eyes are much quicker than they look, and since I have now done it up and taken it off lots of times I have gotten even faster at it.

Constraints:

The first constraint definitely was the most difficult to work with and that was sticking to the timeframe I had. Although having a set end point is an important part of designing, it has restricted how far I could progress with this. I finished everything I had to finish in time, but if I had had more then I would have liked to have done more trials of other aspects of the design such as the sleeve cuff, and the buttonholes.

Luckily these worked out ok and I had no major issues, though this was still more risky than it needed to be. If any aspect that hadn't been trialled had gone wrong, then this could have been a major issue as it would have wasted fabric.

The lack of sustainable and ethical materials has not been too challenging to work around. I managed to source my sustainable linen from my teacher so this was very helpful. The other attachments such as hook and eyes and domes were metal so are ok. I had hoped that Sullivans would respond to my inquiry about their sustainability, but I am glad I at least tried as best I could. I sourced the buttons and elastic second hand so this was a very sustainable way of finding them.

Another constraint that I hadn't considered earlier was access to my stakeholders. Clara especially was very difficult since she often couldn't be bothered giving the time to look through my work with me. I managed to make it work, but her feedback has tended to be more brief than others. If I were to go back to the beginning of this process then I would have picked one of my close friends or another student in my technology class. This would have meant I had access to them much more often than I have had with [REDACTED], and with them also being doing NCEA Level 3, they would have known to take it seriously and give more time. My sister is doing [REDACTED] and isn't taking it very seriously, I think this has been reflected in her feedback. I am still pleased with a lot of her feedback though, the constraint was just her accessibility.

Context Considerations

I have had to think about the context throughout the whole process this year. Making an outfit that is socially acceptable is important as if it wasn't acceptable then I would be very unlikely to ever wear it and it would be distasteful to offend people.

The social acceptability is about how the garments are perceived -how it will be viewed by people in society. This was why I frequently consulted stakeholders as they represent a sample of society. Their feedback has ensured I do not accidentally cross any social boundaries that I wasn't aware of.

Stakeholder use

Throughout my project I have used 3 main stakeholders, and then consulted one wider stakeholder to critique my final prototype. All of these stakeholders have given me valuable advice that I have been able to take on to help improve my prototype. As mentioned above, not having much access to [REDACTED] was a slight limitation, but when I did get feedback from her it was still very helpful. Gaining wider feedback from [REDACTED] was interesting. This feedback was highly beneficial as she looked at my design from an industry perspective, using her own knowledge from her profession as a designer.

Further modifications of my design

One modification I could make would be using a different material. Linen worked well since it is sustainable, but the nature of the material did cause some complications.

Some of these I was aware of from the start such as the fact that it cannot be heat set. This meant I had to spend a lot of extra time considering this during construction and meant I had to add extra detail to make this still work for my design. As mentioned above where I evaluated the garments in my physical environment, the wrinkling of the back of the skirt was an issue due to the material, so a change could potentially improve this. Since natural fibres generally won't permanently press, an option might be to use synthetic material that I could recycle, saving it from landfill.

A further amendment could be made to the garment by using different buttons. Since they are old second hand ones, I didn't get much choice in what they looked like as I was prioritising sustainability over aesthetics for this aspect. The buttons protrude out from the garment more than I would like, so this is something I might re-do if I come across some better buttons in the near future. For now though, they work fine and still look pretty good.

Another minor change I could make that would improve the top would be to double fold and plain sew the sleeve hem of the lower sleeve. It is currently just overlocked, folded over and sewn, but when it falls open, the overlocking is visible on the inside. This isn't a major issue, but it would look cleaner with the overlocking covered. This only came to my attention very recently when I showed [REDACTED] my garments in person and she pointed this out to me.

Overall, I am so proud of what I have created this year and have learnt a lot from the process. I really have defined my pattern making skills, as documenting this journey has made that a focus. I usually just design and sew without stopping to think, so this has opened my eyes to a new way of working that has many benefits. Taking time to plan has meant I have made very few mistakes and likely meant my final design and outcome are much more developed than they would have been without such planning. I can't wait to continue to pursue design as I continue down this path next year while studying fashion design at a tertiary level.

Outstanding Scholarship

Subject: Technology

Standard: 93601

Total score: 23

Q	Score	Marker commentary
Synthesis and integration	08	<p>An interchangeable garment was developed to meet an authentic issue. The requirements and attributes are well researched to establish the parameters of the brief in the broadest sense.</p> <p>The project flows easily demonstrating excellent design thinking in the technological process.</p> <p>A well thought out and developed prototype is underpinned by complex knowledge and a level of refinement that is underpinned by highly competent technological practice.</p> <p>The efficient testing and knowledge that has been integrated within the project demonstrated the required elements of synthesis, polish, and optimization that lead to a prototype that is seen as a viable and responsive design.</p> <p>The development of the garments is innovative and original, enabling the candidate to demonstrate a very high level of skill and creativity.</p>
Justification	08	<p>A combination of very well written evidence and imagery provides visual connections to support the ongoing commentary. This is aided by evidence that is always relevant and with limited repetition of content.</p> <p>A high level of technological modelling is evident throughout, which has enabled the candidate's technological practice to be responsive to the garment's development.</p> <p>The candidate has been discerning with their work to ensure the scholarship criteria has been met.</p> <p>The candidate communicates convincingly and systematically which supports the technological practice of their prototype. This included outlining how complexities and constraints of the developed prototype were resolved and reviewed throughout the project.</p> <p>The result of this allowed the candidate to justify both their technological practice, decision-making, and the effectiveness of the prototype.</p> <p>The candidate has provided a clear and convincing narrative that further enhances our perception of the product.</p>
Critical reflection	07	<p>In this report, it is evident that the candidate has critically reflected on their own technological practice.</p>

		<p>The candidate selected stakeholders as and when needed to aid in the development of the prototype. The stakeholders were consulted based on their expertise for different aspects of the prototype development and implementation, resulting in a high level of skilled execution.</p> <p>They then critically reflected on the information to inform and guide their practice.</p> <p>There is evidence of how the candidate made their decisions and progressed their ideas, with independence, to ensure the product was fit for purpose</p>
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